

For Retailer, Wholesaler and Manufacturer

WELLING HISTORICAL MEDICAL LIBRARY STORE,

WELLIN HE CHENICAL WORKS, 306, E 1,

JANUARY 28 11956



siness

enjoying freedom from napkin rash since extensive national advertising effectiveness against this condition widely known.

, which contains 'Cetavlon', quickly soothes soreness egularly—keeps babies comfortable and contented. In this important use, Savlon is becoming increasingly its value in the treatment of wounds, burns, cuts, many common skin complaints. Retail Price 2/6d.

Press. Frequent Savlon advertisements continue to appear in these National papers and magazines: — DAILY EXPRESS DAILY made TFS Won' KENTELEGRAPH . DAILY HERALD . DAILY MAIL . DAILY MIRROR DAILY SKETCH · SUNDAY PICTORIAL · SUNDAY GRAPHIC · NEWS OF THE WORLD · SUNDAY EXPRESS · WOMAN'S SUNDAY MIRROR WOMAN'S OWN WOMAN'S WEEKLY HOME CHAT HOME NOTES JOHN BULL and in a long list of Provincial papers.

Cinema. A National campaign in 550 cinemas with estimated total attendance of over 50,000,000.

Radio. On Radio

Luxembourg, every To Tuesday at 7:30 p. 11

DISPLAY AND SELL

HE HISTORICAL

AND LEAFLETS ARE READILY AVAILABLE

IMPERIAL CHEMICAL (PHARMACEUTICALS) LIMITED, WILMSLOW, CHESHIRE A subsidiary company of Imperial Chemical Industries Limited

ture heal



COLD CRIAM

COLD CRIAM

BLAND, MELIFAM STRUMENT CRIENT

FIRE YOUR ORDERS CHOOSE TO TOWN

FIRE YOUR ORDERS CHOOSE TOWN

FIRE YO

EMBODIES
EVERYTHING
THE BEAUTY
EXPERTS
ADVISE!

THE SOAP THAT ANSWERS A GROWING NEED

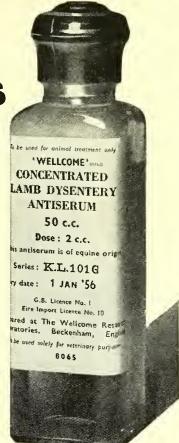
Cussons Cold Cream Soap is a beauty soap made to the specification of beauty experts. It is bland, neutral and superfatted, it embodies Lanoline Cream, and in quality is typical of the high Cussons standard. Nationally advertised in leading women's magazines, Cussons Cold Cream Soap is a certain success, giving you a quicker turnover and a larger margin of profit. Stock and display Cussons Cold Cream Soap.

CUSSONS SONS & CO. LTD · KERSAL VALE · MANCHESTER 7

WANTED within 12 hours

'Wellcome' Concentrated Lamb Dysentery Antiserum should always be to hand. It must be administered to lambs within 12 hours of birth. For this reason, pharmacists should lay in stocks well before the lambing season starts.

The antiserum—used with unvarying success on countless farms in previous lambing seasons—gives an excellent level of protection against dysentery in lambs. In addition, it bestows immunity against pulpy kidney disease during the first three to four weeks of life. A sound investment for farmer and for pharmacist, the antiserum is supplied in rubber-capped containers of 50 c.c. (25 doses) at a list price of 28/-. Showcards, leaflets and advertising stereos are all available to stimulate your sales. National advertising in the farming press will extend from January to March.





BURROUGHS WELLCOME & CO. (THE WELLCOME FOUNDATION LTD.) LONDON

BLAND

RAPID-ACTING

PLEASANT

Disprin

is a superior <u>analgesic</u>
available for the personal use
of everyone



"DISPRIN" provides a soluble form of aspirin in stable condition. It is a product of outstandingly high quality.

RETAIL PRICES

(incl. P.T.

50-tablet bottle 3/3 26-tablet bottle 1/11½ 8-tablet foil 9d.

RECEITT & COLMAN LTD. HULL & LONDON (PHARMACEUTICAL DEPT., HULL

TRADE PRICES

(excl PT)

50-tablet bottle 23/- doz. 26-tablet bottle 13/10 doz. 8-tablet foil 5/2 doz.

N.H.S. basic price 300 tablets in foil 7/6

ROTARY ACTION

gives CLOSER shaves ...

ROTARY ACTION

gives QUICKER shaves . . .

ROTARY ACTION

gives SMOOTHER shaves ...

- THE RESIDENCE

-In fact, PHILISHAVE

ROTARY ACTION

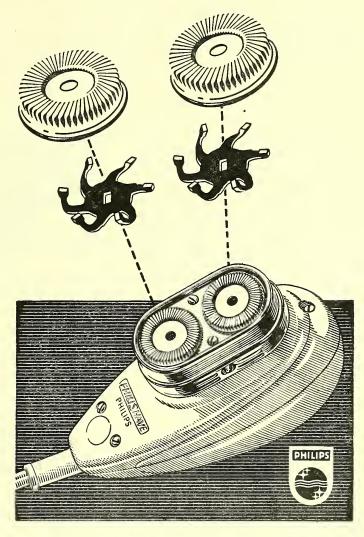
gives BETTER shaves

all round!

In the Press... on the hoardings... over the air from Radio Luxembourg... displayed at shops and exhibitions the length and breadth of the country—'Philishave' Rotary Action will be the sales attraction of the year!

The 'Philishave' leaflets and display

The 'Philishave' leaflets and display material tie up with this colossal campaign. Make sure you get your supply.



Demonstrations and Free Trial Offers are the trump cards you can play to clinch sales of the Philishave.

Please note: as part of their service, to assist you run Free Trial Offer schemes, Philips sterilise any 'Philishaves' you loan on trial. Shavers are returned in brand new condition. Full details can be obtained from the address below.

PHILIPS PHILISHAWE with ROTARY ACTION

THE DRY-SHAVER WITH THE BIGGEST WORLD SALE!

A product of Philips Electrical Limited • Century House • Shaftesbury Avenue • London • WC2
(PS592)

"Skylon

POLYTHENE BOAT SHAPED

BABIES FEEDING BOTTLE

This new boat shaped babies' polythene feeding bottle has been specially developed to meet popular request. It is unbreakable, hygienic, tasteless, odourlessand unaffected by foodstuffs. Openings at either end make for easy cleaning and its light weight makes it ideal for the small infant. All standard teats and valves will fit the necks.



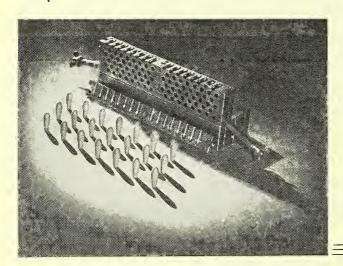
Packed in individual cartons with full sterilizing instructions.



ACORN 5073/4

157 DUKES ROAD · WESTERN AVENUE LONDON





MANUFACTURED BY

from HIGHEST QUALITY MATERIALS

YOU CAN ORDER WITH CONFIDENCE FROM



MANUFACTURING CHEMISTS

MANSFIELD ROAD, DERBY - Tel: 48266 (4 lines) AND AT ASHTON - UNDER - LYNE - Tel: 2816 (3 lines)

INDEX TO ADVERTISERS

A.G.S. & Petronic, Ltd.	37	Cussons Sons
Allcock Products, Ltd.	26	Cuxson, Gerra
Allen & Hanburys, LtdCover iii,	20	
Appleford, Ltd.	22	Daniel, Richar
Associated Newspapers, Ltd	13	'Disprin'
		Domestos, Ltd
Barber Electrical Services, Ltd.	24	
Barnett & Foster, Ltd.	44	Edwards Harle
Bayer Products, Ltd.	31	'Elasto'
Beatson, Clark & Co., Ltd.	32	
Belfast Telegraph	32	Ferris & Co., 1
Bell, John, Hills & Lucas, Ltd.	39	Fibrenyle, Ltd
Berdoe & Fish Classified Sect	ion	Franco-British
British Drug Houses, Ltd., Thc	5	Transco Director
Brome & Schimmer	22	G.B. Equipmen
Buckley Bowker Tablet Co., Ltd.	40	Geigy Pharmac
Burroughs Wellcome & Co1, Interleaved Edit.,	99	Glaxo Laborat
Bush, W. J. & Co., Ltd.	42	Glazo Laborat
		17. l. Ed
Cellucotton Products, Ltd.	11	Hack, Edward
Chemist and Druggist Dictionary of Synonyms	36	Halex
Chemist and Druggist Pharmaceutical Formulas	46	Harker, Stagg,
Chemist and Druggist Poisons Guide	32	Heinz, H. J., & Hinders, Ltd.
Coates & Cooper, Ltd.	42	Hooper, B. &
Cox, Arthur H., & Co., Ltd.	8	1100рсі, в. «
Crookes Laboratories, Ltd., The	23	

Cussons Sons & Co., Ltd
Daniel, Richard & Son, Ltd. 4 'Disprin' 2
'Disprin' 2 Domestos, Ltd. 49
Edwards Harlene, Ltd., 18, 19
'Elasto' 24
Ferris & Co., Ltd. 22 Fibrenyle, Ltd. 4
Franco-British Glass Co., Ltd., The
G.B. Equipments, Ltd
Geigy Pharmaceutical Co., Ltd. 28 Glaxo Laboratories, Ltd. 6
Hack, Edward, Ltd.
Halex 10
Harker, Stagg, Ltd
Heinz, H. J., & Co., Ltd
Hinders, Ltd
Hooper, B. & Co., Ltd
(continued overleaf)

'ANCOLOXIN'

TABLETS

New, safe relief from morning sickness

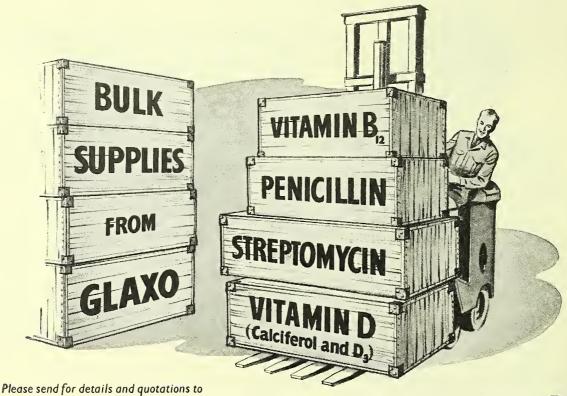
Ancoloxin tablets contain meclozine dihydrochloride (as in Ancolan tablets) 25 mg.—the well-tolerated long acting anti-emetic plus pyridoxine hydrochloride (vitamin B₆) 50 mg.—to correct amino acid metabolism.

They provide symptomatic relief and sustained freedom from nausea and vomiting.

	TRADE	RETAIL
Tubes of 10 tablets	6/8	10/-
Bottles of 50 tablets	28/-	42/

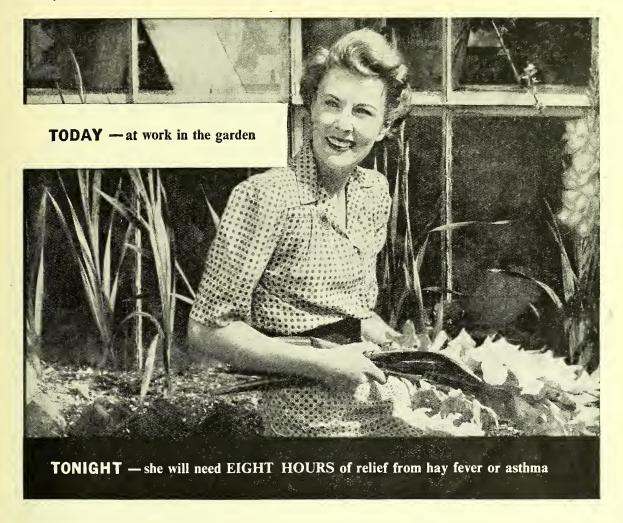
THE BRITISH DRUG HOUSES LTD. LONDON N.1

INDEX (cont.)	Paton, F. C. (Southport), Ltd.	
Illingworth, E., & Co. (Bradford), Ltd	Pfizer, Ltd.	
Imperial Chemical (Pharmaceuticals), Ltd. Front Cover,	Philips Electrical, Ltd	
25, 26	Pierson, Morrell & Co., Ltd.	
Johnson & Johnson (Great Britain), Ltd 14, 15	Robinson & Sons, Ltd.	4:
Jones, Samuel & Co., Ltd	Roussel Laboratories, Ltd.	
Kelly, John (London), Ltd	Searle, G. D. & Co., Ltd Cover	į,
	Simpkin, A. L. & Co., Ltd.	
Lederle Laboratories DivisionInterleaved Edit., 100	Smith, T. J., & Nephew, Ltd.	
Lehn & Fink Products, Ltd	Stewart, Goodall & Dunlop, Ltd.	
London Commercial Electrical Stores, Ltd	Stewart, Goodan & Buntop, Etc.	,
BE -1. BEC. C. T. 1	Testar & Swain, Ltd.	2
Maylen Mfg. Co., Ltd	Therapion (Pty.) Ltd	
Maw, S., Son & Sons, Ltd	•	
	Van der Velde, Ltd	2
Mosans Preparations	Vernon & Co.	
N. d. al Cl. W. J. dr. b) v. J.	Vines Biocrin, Ltd.	4
National Glass Works (York) Ltd	·	
Nunale Co., Ltd	Warner William D. & Co. Ltd	l,
	Warner, William R., & Co., Ltd.	1
Olley, C., & Sons, Ltd	Washington Chemical Co., Ltd., The	4
Organon Laboratories, Ltd	Wilson & Mansfield, Ltd.	
Orridge & Co Classified Section	Trison & Mansieu, Ltu.	7
Parke, Davis & Co., Ltd Leader Page	Yalcs, Ltd.	3



BULK SALES DEPT., GLAXO LABORATORIES LTD., GREENFORD, MIDDLESEX BYRon 3434





Pollen-sensitive patients dread the approach of Summer. Not only during the day but also *at night* they need relief from the wretchedness of hay fever, or asthma's choking distress.

Tedral Enteric Coated for Extended Relief. Tedral and Tedral Enteric Coated tablets work together to bring relief within minutes...lasting for eight hours. As the active principles in Tedral relax smooth muscle and reduce oedema, breathing becomes easier and tension diminishes.

Dosage. Tedral (plain) acts within 15 minutes, lasts 4 hours. Tedral Enteric Coated has a delayed action of 4 hours. Thus one Tedral plus one Tedral Enteric Coated will give most sufferers eight hours' relief... enough to last the night.

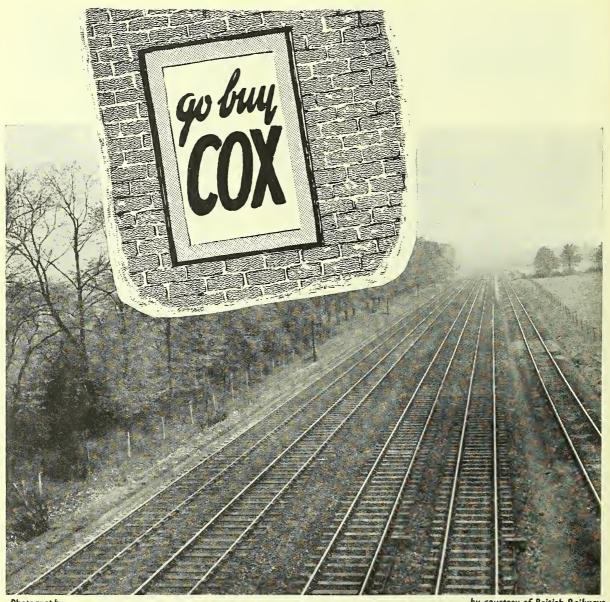
Tedrat provides:

Theophylline - - - - 2 gr. (130 mg.)
Ephedrine hydrochloride - $\frac{3}{8}$ gr. (25 mg.)
Phenobarbitone - - - $\frac{1}{8}$ gr. (8 mg.)



Both Tedral tablets and Tedral Enteric Coated tablets are available in bottles of 50; and 500.

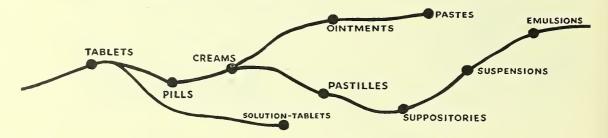
No Warner product has ever been advertised to the public. William R. Warner & Co. Ltd., Power Road, London, W.4.



Photograph

by courtesy of British Railways

Make it your permanent way

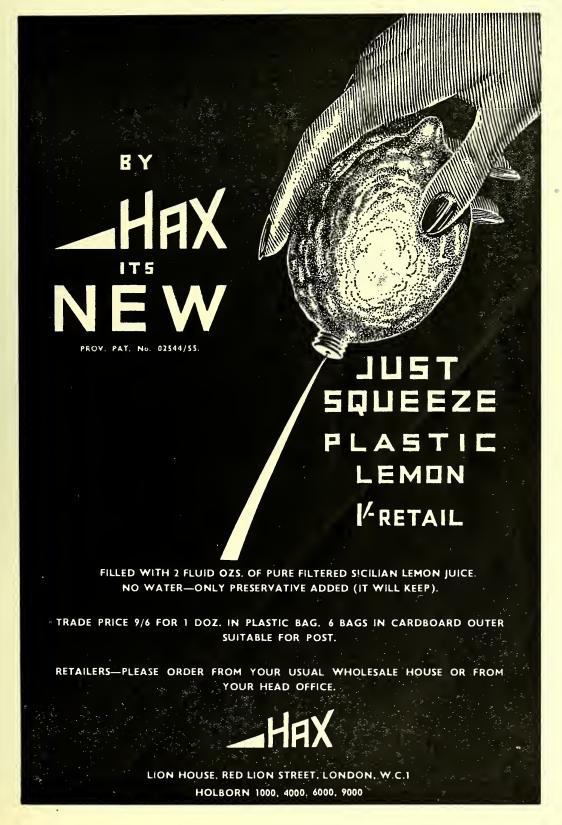


ARTHUR H. COX & CO. LTD., BRIGHTON, ENGLAND.

One of the world's foremost tablet makers

PANCAKE DAY FEB. 14

Only 2 weeks time





With the new

HALEX

pick-your-pattern bonus, you get

4 FREE DISPENSERS

newly styled for bigger sales

Let these bright, brand-new dispensers do a selling job for you. Better still! This year's Halex pick-your-pattern bonus offers you free toothbrushes with every order — and you can order as many as you like.

Here's how the plan works:

For every 3 dozen or more brushes ordered you get 3 free brushes. For every 6 dozen or more brushes ordered you get 12 free brushes. For every 12 dozen or more brushes ordered you get 36 free brushes.

And here's your profit!

On 3 dozen brushes or more plus bonus $62\frac{1}{2}\%$ On 6 dozen brushes or more plus bonus 75%On 12 dozen brushes or more plus bonus $87\frac{1}{2}\%$



Buy as many brushes as you like, pick any pattern you like—
THERE ARE NO RESTRICTIONS!

And here's a typical dispenser:

No. A 624 ready packed with 2 dozen No. A 260 toothbrushes—the 1/6d. value-for-money brush.

Your supplier will send you both your free dispensers and your bonus brushes.

Get in touch with him today!

New KOTEX* prices from February 1st

KOTEX TWELVES

Consumer price 2'
Trade price per doz. 18'3

case content 4 doz.

KOTEX FIVES

Consumer price 1'
Trade price per doz. 9'
case content 6 doz.

Orders dated before February 1st, for *immediate* shipment will be invoiced at January prices. Kotex may be included with Kleenex and/or

Delsey for Special Display allowance.



The new pearl-grey Kotex box is factory-wrapped in plain brown paper. Just hand a pre-wrapped box of Kotex sanitary towels straight to your customers—or let them help themselves. Saves cost of wrapping—saves time for you, assistants, customers. And for your convenience one box in four comes unwrapped for display purposes.

Don't forget Kotex Fives are now packed in a plain, creamcoloured, tailored bag, with a tear-off label.

KIMBERLY-CLARK LTD., CARKERS LANE, LONDON, N.W.5. *Regd. T.M.



Here's the big news about adhesive dressings



lets the wound BREATHE yet it's WATERPROOF





Elastoplast, biggest seller among adhesive dressings, now goes still further ahead with Airstrip. This entirely new idea in adhesive dressings has *all* the selling appeals to make it an immediate success.

Elastoplast Airstrip helps wounds heal quicker. Airstrip allows the wound to breathe and skin moisture can evaporate because the new plastic backing is micro-porous. Skin does not go white and dead-looking beneath the dressing.

Elastoplast Airstrip keeps out liquids. Although it allows the wound to breathe the new plastic backing is waterproof so it keeps out oil, water, grease and dirt.

Elastoplast Airstrip looks like skin. Women will like the unobtrusiveness of new Elastoplast Airstrip. It is exceptionally comfortable to wear, too.

Elastoplast Airstrip strips off easily. It is easy to strip off and leaves no hard-to-remove plaster marks.

Elastoplast Airstrip will be sold to the public in 2 sizes.

1/- Trade price 8/6 per dozen.

2/- Trade price 17/- per dozen.

Large scale national advertising will begin in March. Be ready to meet the big demand for this new Elastoplast dressing by stocking up now



SMITH & NEPHEW LTD · WELWYN GARDEN CITY · HERTS



"My Daily Mail" by LORD LOVAT

"THERE are many reasons why I read the Daily Mail. As a Scotsman keenly interested in Scottish affairs, I find that it presents the events of the day in correct perspective, while Scottish problems are treated with sympathy and understanding.

We have our own national newspapers in Scotland, but it is nevertheless good to have one which caters for the whole country and the overall picture. The Daily Mail covers

the Scottish field extremely well, and has become part of life north of the Border.

I like the newspaper for its sensible, easy-to-read leading article, for its realism, its refusal to pander to some of the more sensational elements in modern life, and, in particular, for the thorough coverage it gives to agricultural affairs.

I always read the Daily Mail. In fact, I read it from cover to cover."



Johnson Johnson

THE WORLD'S

MOST TRUSTED NAME
IN SURGICAL DRESSING

Johnson & Johnson. To most of your customers, the is the name behind such famous products as Johnson Baby Powder and Soap, TEK Toothbrushes at BAND-AID First-Aid Dressings. To doctors at nurses, Johnson & Johnson stands for surgical dressings, RAY-TEC X-Ray Detectable Swabs, Zob Cotton-Wool Filmated Sponges, KLING Conforming Bandages and many other hospital and medic specialities. To dentists, it means absorbent demapkins, dental rolls and points, dental floss, cott wool pellets and throat packs. But always, Johns & Johnson stands for products which profession men, and the public, can trust.

THE LARGEST ORGANISATION OF ITS KIND

The Johnson & Johnson Company is not only, professional repute, the leading firm of its kind, bu is the largest organisation of surgical dressing man facturers in the world.

In this country, four major factories are operated the Company at Gargrave, Earby, Wrexham a Portsmouth: every product is manufactured in cordance with the most exacting scientific and to nical standards to ensure that it is as perfect as more cal knowledge, technical skill, and human endeaver can make it.



Johnson & Johnson's Fortsmouth factory, where Johnson's Boby Products, Flosters and EAND-AID First Aid-Dressings are made

JOHNSON'S BABY POWDER · BABY SOAP · BABY SHAMPOO · BABY LOTION · 'TEK' TOOTHBRUSHES

'BAND-AID' ELASTIC AND PLASTIC FIRST-AID DRESSINGS · 'ZO' AND 'ZONAS' SPOOL PLASTERS

'ELASTIKON' ELASTIC ADHESIVE BANDAGES AND PLASTERS · MEDICATED PLASTERS

COTTON WOOL · SURGICAL GAUZE AND LINT · W.O.W. BANDAGES AND CREPE BANDAGES

FOOT PRODUCTS · 'MODESS' PERSONAL PRODUCTS · HANDKERCHIEF TISSUES

OVERSEAS ACTIVITIES

EUROPE · MEDITERRANEAN

W. AFRICA · CENTRAL AFRICA · E. AFRICA

NEAR EAST · INDIA · PAKISTAN

CEYLON · FAR EAST

ASSOCIATED COMPANIES

AMERICA · CANADA · BRAZIL

MEXICO · ARGENTINA · AUSTRALIA

NEW ZEALAND · SOUTH AFRICA

S. RHODESIA · IRELAND

Johnson Johnson

THE FULL RANGE

IMMEDIATE DELIVERIES

AMPLE SUPPLIES AVAILABLE of

CORTISYL ROUSSEL

Cortisone

and

Hydro CORTISYL ROUSSEL

Hydrocortisone



Manufactured in England since 1952 from raw material of Commonwealth origin, by

ROUSSEL LABORATORIES LTD
LONDON, N.W. 10 LADbroke 3608



C

FOR GREY 8

COLOUR RINSE

Edwards Harlene Ltd. introduce their no hair colour rinse—for grey, greying and wh

> Swoke is unique—an easy-to-use, brush-on, wash-away tint that imparts a youthful,

glamorous shade to faded or greying hair not a hint of blue or mauve.

Be ready to meet the demand that will be created by the National Magazine Advertising Programme commencing on April 14th in the following:-

Woman's Own

Woman & Home

Woman's Journal

Housewife

Wife & Home

Woman & Beauty

Good Housekeeping, etc.

Glamour in Grey A Harlene PRODUCT

"Smoke" is packed in this attractive counter display carton which forms a dispenser.

Glamour in Grey

d exciting r—'Smoke'

pecial Bonus Offer NO 5/6 BOTTLES FREE

wing you

% PROFIT

cost including tax.

only pay for 10 bottles in every 12. pay the purchase tax on the bonus bottles.



















SPECIAL BONUS OFFER COUPON

IS FER OSES RCH 31 То EDWARDS HARLENE LTD. 58 Gough St., London, W.C.1.

Please supply doz. "Smoke" Hair Colour Rinse at Bonus price of 42/3 per dozen nett. In Counter Display Carton Dispenser.

Name	and	Address	
------	-----	---------	--

Name and Address of usual Wholesaler



"Precisely, Mr. Baxter ...

... that puts the matter in a nutshell. One can say that I.Z.S. is the insulin of the moment ... particularly for a new diabetic. The thing to remember, gentlemen, is that I.Z.S. seems to have it both ways, so to speak. It gives a rapid initial response, yet one injection will usually control the blood sugar level adequately for up to 24 hours. This is a great advance. There are, of course, a few diabetics who benefit more from a modification of the standard I.Z.S. In such cases, varied proportions of the different forms of I.Z.S. can be injected. If a quicker initial action is desirable, the patient is instructed to use more I.Z.S. amorphous in his syringe, or alternatively, more I.Z.S. crystalline to prolong the effect of the injection. Any other questions?"

I.Z.S. A.B. Vials of 10 c.c. 40 or 80 units per c.c.

I.Z.S. A.B. (Amorphous). Vials of 10 c.c. 40 units per c.c.

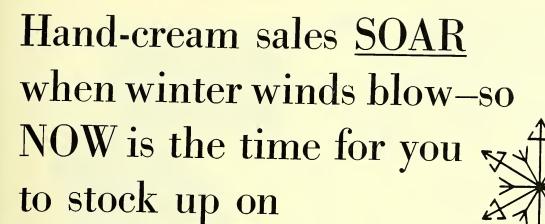
I.Z.S. A.B. (Crystalline). Vials of 10 c.c. 40 units per c.c.



ALLEN & HANBURYS LTD

LONDON E2

THE BRITISH DRUG HOUSES LTD LONDON NI



Hinds

Honey and Almond cream

Soon, your women customers will be asking for hand-creams to relieve winter chapping and cracking. Sell them on Hinds famous Honey-and-Almond Cream, and you'll send up your hand-cream profits by leaps and bounds!

Dull, wintry weather will mean a bright outlook for you on hand-cream sales—if you order full stocks of Hinds right away.

HONEY-AND-ALMOND CREAM WITH LANOLIN

Lotion in bottle, 1/3d. 2/2d. 3/9d. Cream in tube, 1/3d. Cream in jar, 3/-.

LEHN AND FINK PRODUCTS LIMITED, RAYNES PARK S.W 20

Hinds

cream







THE MANUFACTURING & WHOLESALE CHEMISTS

who can be relied on for

REGULAR ROAD DELIVERIES

In the West of England and S. Wales areas

Telephone: Bristol 24381



& CO LTD BRISTOL

Telegrams : 'Ferris, Bristol'

COUNTER DISPLAY OUTER (I doz) Plus I Tube For TRIAL ORDER to prove it SELLS and REPEATS

The Original for MOUTH ULCERS and those TENDER SPOTS, COLD SORES, etc. 20 years reputation now being advertised. 100% Chemists only. Order Now. 2/3 Retail and 15/- Plus P. Tax 4/6.



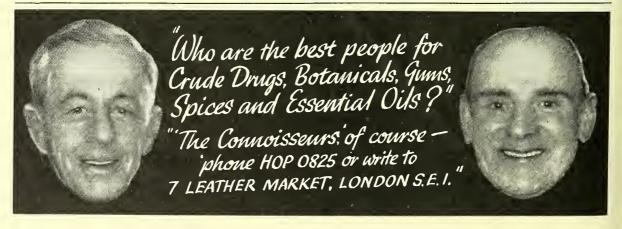
F. C. PATON (Southport) LTD., SOUTHPORT

Advertising for

APPLEFORD'S CIDER VINEGAR

begins in JANUARY

and runs throughout 1956
APPLEFORD LTD., LANDOR ROAD, LONDON, S.W.®





Will your supply meet public demand?

IT'S TIME TO RE-ORDER

CROOKES

HALIBUT OIL CAPSULES

Our powerful national advertising campaign now in full swing is building up maximum support for your over-the-counter sales. Take advantage of this support at its peak and ensure maximum remuneration from sales of this high-profit line by restocking right away. Don't be caught with an empty storeroom. Send in your orders now.

Bonus terms are still available

CROOKES HALIBUT OIL CAPSULES



PRESCRIPTION



HEALTH-MASTER

... are what your customers are needing. ARE YOU STOCKING NOW?

★ The amazing 365 Model. Combined Ultra-Violet and Infra-Red/Luminous Heat Lamp. Powerful pure fused quartz mercury vapour burner of the high pressure type. £13.13.0

The 465 Model. For the first time, a superb floor-stand model with 3-stage control. Ultra-Violet, Infra-Red or Luminous Heat. £25.0.0

The "POPULAR" Model. A low priced portable Infra-Red and Luminous Heat Lamp. 10" parabolic reflector and powerful polykymatic generator for quicker deep heating effect. £4.10.0

The 325 Model. Infra-Red/Luminous Heat De-Luxe Model. £8.10.0

The 425 Model. Telescopic, Floor-Stand Model. Infra-Red/Luminous Heat. £9.15.0

Produced under rigid laboratory control by:

BARBER ELECTRICAL SERVICES LTD.
BIRMINGHAM, 16

Telephone: Edgbaston 3511 (P.B.X.) Telegrams: Barberlamp, B'ham, 16

Build up Goodwill with . . .



Many Chemists are recommending 'ELASTO' to their customers with mutually good results.

PATA

NEW ERA LABORATORIES LTD. Cecil House, Holborn Viaduct, London





OFFER

On orders booked before May 1st

Orders totalling **120 oz.** qualify for **2**½% discount off Trade Price for example

 $(12 \times 4 - oz. + 12 \times 6 - oz.)$

or

 $(12 \times 4 - oz. + 6 \times 6 - oz. + 3 \times 12 - oz.)$

Orders totalling **240 oz.** qualify for **5**% discount off Trade Price

for example

 $(24 \times 4 - oz. + 24 \times 6 - oz.)$

or

 $(24 \times 4 - oz. + 12 \times 6 - oz. + 6 \times 12 - oz.)$



Generous seasonal advertising support in Radio Times, and many home interest and women's journals.

AEROSOL

Lorexane Aerosol Sprays contain gamma BHC, lethal to insects, harmless to humans and animals. This safe but deadly insecticide, in its highly efficient aerosol pack, is rapidly growing in popularity.

ORDER NOW FOR APRIL/MAY DELIVERY

RETAIL PRICES EACH-

4-oz. pack 5/-

6-oz. pack 6/6

12-oz. pack 10/6

LOREXANE' INSECT

contains Gamma BHC



IMPERIAL CHEMICAL (PHARMACEUTICALS) LIMITED, FULSHAW HALL, WILMSLOW, CHESHIRE

A subsidiary company of Imperial Chemical Industries Limited

Ph 612T







Extra tube FREE with every dozen!

PREPARE for bigger-than-ever SCAN sales! Now soothing, cooling SCAN eye drops comes in a new, improved pack—a flexible eye-dropper for easy on-the-spot application. A wonderful sales-booster! There's a compact dispenser for your counter holding 12 tubes too.

More! There's a great new Bonus Offer now in full swing . . . 13 tubes of SCAN for every 12 you order. This bonus offer is available until the 25th February, 1956.

The demand for SCAN will be given added impetus by national advertising and sales promotion. Make sure you have stocks on hand by taking advantage of this new pack and bonus offer.

Trade: 10/6d. per dozen (P. Tax-30%) Retail: 1/6d. per tube (inc. P. Tax)

ORDER TODAY FROM YOUR USUAL WHOLESALER
Or direct from:—

ALLCOCK PRODUCTS LIMITED

KNOWSLEY ROAD · LIVERPOOL 20



'Sulphamezathine' Sodium Solution 16°/0

As FROM 20TH JANUARY 1956, under Statutory Instrument No. S.I. 1955, No. 1978, 'SULPHAMEZATHINE' SODIUM SOLUTION 16%, as a preparation for the treatment of coccidiosis in poultry, is exempted from the requirements of the 4th schedule to the Poison Rules.

We know from our many friends in retail pharmacy that they will welcome the fact that it is no longer necessary for the small poultry-keeper to obtain a veterinary surgeon's prescription before he can purchase this popular and most efficient coccidiosis remedy. The purchaser may now obtain 'Sulphamezathine' Sodium Solution 16% merely as a 1st Schedule Poison.

'Sulphamezathine'

sodium solution 16%
—the unsurpassed remedy
for coccidiosis



IMPERIAL CHEMICAL (PHARMACEUTICALS)
LIMITED, WILMSLOW, CHESHIRE

A subsidiary company of Imperial Chemical Industries Limited

Ph.552T

TO HELP YOU SELL MORE FLASH THIS WINTER!

RIGHT through the winter Philips are running a striking campaign for flash photography with "Photoflux" flashbulbs. Photographs like these, illustrating the various occasions and settings suitable for flash, will be appearing regularly in the photographic press. Copy will tell the story behind each shot and mention the type of "Photoflux" flashbulb used.

MORE SALES OF ALL FLASH EQUIPMENT

Not only flashbulbs but all kinds of flash equipment will sell as a result of this winter campaign. Make it quite clear you stock "Photoflux" by keeping your window and shop interior alive with "Photoflux" display material.

"Perfection in a Flash", Philips Free reference booklet, will be featured in all the winter advertising. So keep a place clear on your counter for this helpful Free booklet.



PHILIPS OTOFLUX

FLASHBULBS

for "Perfection in a Flash"



PHILIPS ELECTRICAL LTD. · CENTURY HOUSE · SHAFTESBURY AVENUE · W.C.(
"PHOTOLITA" PHOTOFLOOD LAMPS · DARKROOM SAFELIGHT BULBS · "PHOTOCRESCENTA" OPAL ENLARGER LAMPS AND PROJECTOR LAMPS
(PP859RBV.)

LARGE SCALE PRODUCTION



Phenobarbitone B.P.

Barbitone B.P.

Butobarbitone B.P.C.

Amylobarbitone Sodium B.P.C.

Cyclobarbitone Calcium

Methylphenobarbitone B.P.

Phenobarbitone Sodium B.P.

Barbitone Sodium B.P.

Amylobarbitone B.P.C.

Cyclobarbitone B.P.C.

Hexobarbitone B.P.

Quinalbarbitone Sodium B.P.

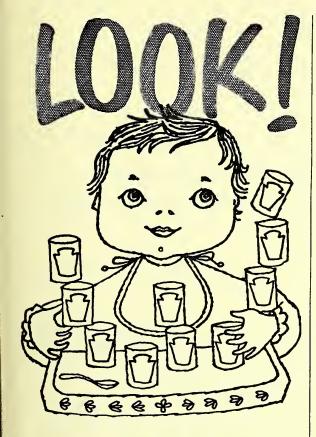
GEIGY PHARMACEUTICAL

> Rhodes, Middleton,

COMPANY MANCHESTER



FC22.



A 6-months-old baby can eat all these and often more—in I week!

Why modern babies are better customers for Heinz Strained Foods

Modern mothers are relying more and more on Heinz Strained Foods to give their babies a nourishing, varied diet. That is why modern babies are becoming better and better customers for you.

Just think of it. There are 800,000 babies of Strained Foods age in this country. And the majority already eat Heinz Strained Foods. Yet the amount and variety each baby has can be increased enormously.

First, by advertising. Heinz new campaign explains why Heinz Strained Foods are so good, and stresses that they are more nourishing than many home-prepared foods.

Second, by display. By displaying all 19 varieties of Heinz Strained Foods you can make mothers see for themselves the varied diet that Heinz provide. Ask your Heinz representative for the sales-compelling display material, emphasizing the goodness and variety of Heinz Strained Foods. Displays bring increased sales.

H.J. HEINZ COMPANY LTD., Harlesden, London N.W.10



HEMIST RUGGIST

The weekly newspaper for pharmacy and all sections of the drug, pharmaceutical and fine chemical, cosmetic, and allied industries

Official organ of the Pharmaceutical Society of Ireland and the Pharmaceutical Society of Northern Ireland

Volume 165

January 28, 1956

No. 3962

CONTENTS

Aids to Productivity		86	
British Poliomyelitis	Vaccine	83	
Committee of Public	Accounts	82	
Company News		85	
Correspondence		88	
From Victoria to Eliz		93	
Hospital Pharmacy F		98	
Leading Articles:—			
A Proud Year in	Pharmaceutic	al	
Exports		91	
Conflicting Evidence			

The Way to Count	the Cost	91	
Onward from Galen		92	
Overseas Trade in 195	is	85	
Pain and Analgesics		94	
Pharmaceutical Socie			
Ireland: Council M		101	
Pharmacies of Britain	-	89	
Purchase-tax-free Dru		84	
Topical Reflections	C		
_			
British Fine Chemicals 101	New Products		
Business Changes 87	P.A.T.A		
Coming Events 104	Pharmacist's A		
Deaths 84	Price Changes		
Irish News 80	Print and Publ		
Legal Reports 83	Scottish News		
Lighting 86	Trade Marks		
New Companies 85	Trade Notes	87	

INDEX TO ADVERTISERS, Pp. 5 & 6.

EDITORIAL AND PUBLISHING OFFICES

28 ESSEX STREET, STRAND, LONDON, W.C.2

Telephone: Central 6565

Telegrams: Chemicus, Estrand, London

Branch Offices:

BIRMINGHAM, 2: 111 New Street.

Phone: Midland 2921

GLASGOW: 35 Kingslynn Drive, LEEDS, 16: 32 Wynford Rise, King's Park, S.2. West Park. Phone: Leeds 78438

Phone: Langside 2813

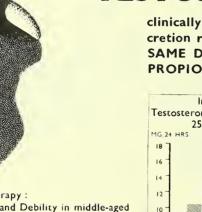
ANNUAL SUBSCRIPTION, which includes The Chemist and Druggist Diary and Year Book, £2. Single copies one shilling each.

nature's androgen TESTOSTERONE BP

without injection

SUBLINGS TESTOSTERONE 10 mg.

clinically effective and produce a 17-ketosteroid excretion rate COMPARABLE TO THAT FROM THE SAME DOSAGE OF INJECTED TESTOSTERONE PROPIONATE



In Males

Supplementary Therapy:

- (1) Depression and Debility in middle-aged males where androgen therapy is indicated.
- I 2 Sublings daily.

Full Replacement Therapy:

(2) As in Eunuchism and Eunuchoidism, etc.

I Subling thrice daily.

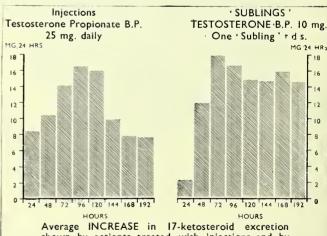
In Females

- (1) Excessive Functional Uterine Bleeding:
- 1 3 Sublings daily for 3 4 days.
- (2) Inoperable Mammary Carcinoma:
- 2 6 Sublings daily.

PACKINGS

25 ; 100 ; 500.

Literature on request from



Average INCREASE in 17-ketosteroid excretion shown by patients treated with injections and by those treated with 'SUBLINGS' TESTOSTERONE (pre-treatment levels were within the accepted limits of normal in all cases)

ORGANON LABORATORIES LIMITED

BRETTENHAM HOUSE, LANCASTER PLACE, LONDON, W.C.2

Telephone: TEMple Bar 6785-6-7 & 0251-2 Telegrams: Menformon, Rand, London

Volume 165

JANUARY 28, 1956

No. 3962

3d. "Margin" per Prescription

MYSTERY SUM IN COMMITTEE EVIDENCE

IN Scotland in 1952-53 there was an "apparent margin" per National Health Service prescription of just over threepence.

That information was given to the Committee of Public Accounts in July 1955 by the secretary of the Department of Health for Scotland and is revealed in a report of the Commit-tee recently published. A summary of the report is given on p. 82.

A.B.P.I. Development

VETERINARY DIVISION FORMED

THE council of the Association of British Pharmaceutical Industry has set up a veterinary division of the Association which will be known as Division E. The division will consist of:

"Manufacturers of veterinary pharmaceutical, biological or antibiotic products for the home and export markets, these products being supplied in the home market projects." the home market mainly to registered veterinary surgeons and practitioners, retail pharmacists or pharmaceutical wholesalers." The A.B.P.I. states that the move recognises the importance of the contribution which pharmaceutical manufacturers are making to veterinary

medicine and will facilitate co-operation between the industry and the veterinary and pharmaceutical professions.

Rural Contractors

PATIENTS' CHARGES ARRANGEMENTS

THE arrangements whereby chemist contractors in rural areas can submit prescription forms on which the shilling charge has been paid by postage stamps are being modified. A Ministry of Health circular to Executive Councils says that those arrangements should be permitted when the number of prescriptions affected is substantial though not necessarily 10 per cent. (the previous limit laid down) of the total. The circular points out that it is not considered that the number of stamped forms submitted is in all cases a true indication of the number of prescriptions supplied without direct meeting of the contractor and the patient or his agent. "It will be for the chemist-contractor to furnish supporting evidence

If your C. & D. is late ...

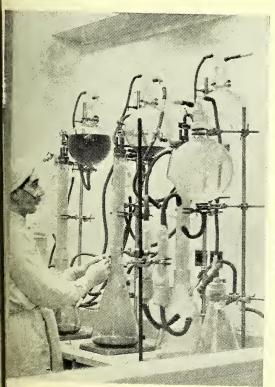
A dispute within the printing trade may cause some copies of this issue to be received late by subscribers. News and advertisements may for the same reason be fractionally less up-to-date, or less complete, than usual. Every effort is being made to keep as close to normality as possible, but THE CHEMIST AND DRUG-GIST is not one of the parties to the dispute and some subscribers and advertisers may be called upon to show forbearance. To any such we offer our apologies in advance.

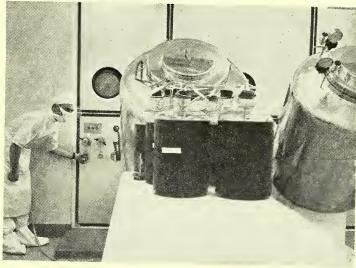
in any case of doubt," concludes the circular, "and it is considered desirable that the Council should consult the Local Pharmaceutical Committee before taking a final decision."

Guillebaud Report

FOR RELEASE ON JANUARY 25

TOR RELEASE ON JANUARY 25
IT was made known on January 25
that copies of the Guillebaud report
on the cost of the National Health
Service were being released to the
Parliamentary lobby correspondents at
4 p.m. By that time the C. & D. had.





POLIOMYELITIS VACCINE PRODUCTION: Above, A photograph taken at the virus research unit of Glaxo Laboratories, Ltd., Stoke Poges, Bucks, In a newly-constructed block, several hundred yards from the main poliomyelitis vaccine production laboratories, "pools" of single-strain vaccine are being transferred to stainless steel tanks for "mixing" the final vaccine. The maintenance of sterile conditions in the block is so important that if the operator has to leave the unit conditions in the block is so important that if the operator has to leave the unit he has to take a shower and put on fresh sterile clothing before re-entering. Left, A stage in the processing of the vaccine at the Wellcome Research Laboratories, at Beckenham, Kent. The Minister of Health announced a poliomyclitis vaccination programme at a Press conference in London on January 19 (see p. 83), Only Britishmade vaccine is being used in the programme.

owing to special printing arrangements, already gone to Press. On the assumption that the report is duly released, it will be fully dealt with in next week's issue.

Test Prescriptions

BIRMINGHAM EXECUTIVE COUNCIL BIRMINGHAM Executive Council recommended at its meeting on January 6 that monetary penalties should be imposed on two chemists and that a third should be admonished for dispersion of the comments of the co pensing errors. In each of the first two cases it was reported that an excess of liquefied phenol was found in mouth wash and nasal wash, the excess amounting in one case to 113.5 per cent, and in the other to 15.9 per cent. The chemist who is being admonished dispensed an ointment 23.3 per cent. deficient in sublimed sulphur. "A more serious view will be taken of any instance of inaccurate dispensing in the future," stated the Council. In a fourth case before the Council a sample prescription alleged to have had a 9-3 per cent, excess of potassium bromide was found by the chemist's own analyst to be deficient in potassium bromide. A third sample was submitted to a referee analyst, who also reported a potassium bromide.

ficiency. The Council decided to take no further action in the matter. Retail Sales

also reported a potassium bromide de-

BOARD OF TRADE FIGURES

RECENTLY issued Board of Trade figures show that sales of chemists' goods by large retailers were 24.4 per cent. higher in November 1955 than in October 1955. October 1955 and 10.5 per cent, higher than in November 1954. Independent retailers' sales dropped by 1.7 per cent. (based on revised index number) in November 1955 compared with October 1955. Independent retailers' sales were 7 per cent. higher (old index) in November 1955 than in November 1954.

Key Industry Duty

THYMOL UNDER NEW EXEMPTIONS

UNDER an Order (published as S.I., 1956, No. 46) the following chemicals are exempted from Key Industry Duty, for the period January 23 to February 18:—Diethylene glycol monomethyl ether, 1-phenyl-3-methyl-5-pyrazolone (of a purity not less than 99 per cent., and having a melting point of not less than 128° C.). tetrachlorophthalic acid than 128° C.), tetrachlorophthalic acid, thymol (but not including isothymol), and trifluoroacetic acid.

Women Pharmacists

NOMINATIONS FOR NATIONAL COUNCIL

CLOSING date for nominations for the national council of the National Association of Women Pharmacists is February 1. Nominations should be addressed to the secretary of the Association, Mrs. E. N. J. Jones, 6 Ravenswood Avenue, Rock Ferry, Ches.

Awards for Employees

RECOGNITION OF LONG SERVICE LONG-SERVICE awards were presented at Ruabon, Denbighs, on January 19, to sixteen employees of Monsanto Chemicals, Ltd., who completed twenty-five years' service during 1955. Guests of the company at the presentation dinner were more than 140 longservice employees whose combined service totalled more than 5,000 years. The presentations were made by Mr. D. R. Mackie (acting managing director), who expressed the company's great pride in the fund of skill and experience represented by those present.

SCOTTISH NEWS

Election Nominations

FOR PHARMACEUTICAL COMMITTEES

IN connection with the Local Pharmaceutical Committee elections in Scotland, a notice of election and nomination form have been sent to each elector on the lists. Any pharmacist entitled to vote, who has not received those docu-ments should immediately notify the Returning Officer, 36 York Place, Returning Officer, 36 Edinburgh, 1.

Prescribing Costs

ADVERSE COMMENT NOT CALLED FOR

ALTHOUGH the Scottish Department of Health has expressed concern, Banff, Moray and Nairn Executive Council has stated that it finds no reason to comment adversely on the prescribing methods of any one of the twenty-nine doctors whose prescribing costs were 20 per cent, or more above the national average for December 1954.

IRISH NEWS

Associates' Section

MONTHLY COMMITTEE MEETING

AT the January meeting of the Committee of the Associates' Section of the Ulster Chemists' Association, Mr. J. E. Morley in the chair, the following applications for associateship were approved: Pharmaceutical Chemist, Messrs. J. C. O'Brien and J. J. Murtagh; Apprentice, Mr. R. Crockett. Messrs. R. Holliday and T. Thompson were welcomed on their first attendance as committee members. The secretary was requested to circularise Associates about the annual dance that is being held on February 23.

Wood Sculpture

TALK TO IRISH STUDENTS

WOOD sculpture was the subject of a talk by Mr. Ian Friers at a meeting of the Society of Pharmaceutical Students at the Maria of Call dents at the Municipal College of Technology, Belfast, on January 10. A Gordon W. McGlaughlin presided. Mr.

FESTIVE OCCASIONS

HERTFORD

First Social Function

To attract dancers early on to the floor is a perpetual problem to many social committees. Hertford Branch of the Pharmaceutical Society, at their inaugural dance at Welwyn Garden City on January 20, solved the problem by awarding some of the "spot" prizes very early in the proceedings and also by prizes to the first couple to "take the floor." MR. C. W. MAPLETHORPE (chairman of the Branch) and Mrs. To attract dancers early on to the floor the floor." MR. C. W. MAPLETHORPE (chairman of the Branch) and Mrs. Maplethorpe welcomed the 150 pharmacists and friends, who weathered a gale to attend the first social function of a branch not yet twelve months old. During the evening all the available raffle tickets for two prizes donated by Mr. Maplethorpe were sold and the proceeds, amounting to almost £11, are being given to Birdsgrove House. Mr. Maplethorpe was himself the winner of the first prize (a basket of fruit), but handed it over to Mr. F. W. Adams (registrar of the Society), to pass on to Mrs. Adams, who was unable to attend because of illness. Mr. H. S.

Grainger (a member of the Society's Council) was the guest of honour for the evening. The committee hope to hold a similar function each year.

FINCHLEY Smog No Deterrent

Smog did not deter 100 pharmacists and friends from attending a New Year party held by Finchley Branch of the Pharmaceutical Society on January 5 in aid of Birdsgrove House. Forgetting the dismal weather outside, the lively M.C., Mr. C. Harris, soon had the party warmed up with party-games, dances and songs. In a short address, Mr. D. M. Neil (Branch chairman) said that the function of Birdsgrove House was to assist in restoring to good health pharmacists and dependants who visited it for a period of convalescence. In 1954-55, 295 guests had been accommodated in the house. He appealed to the members to be generous in their support. During the evening many tickets for a popular television panel game were given as prizes. The chairman announced that about £28 had been raised.



HOUNSLOW DANCE: Principal guests at the Hounslow Branch of the Pharmaceutical Society on January 18 were the mayor and mayoress of Heston and Isleworth Left to right, standing Messrs. J. L. L. Heppenstall (vice-president of the branch), W. Waterman (president)
S. G. Davis (secre-tary); seated: Mrs Heppenstall, the mayor ess, the mayor, Mrs L. W. West and Mr West (social secretary)

NEWS IN BRIEF

APPOINTED director of the Wellcome museum of medical science, Lieutenant-Colonel C. A. Bozman, O.B.E., is commencing his duties on February 1.

DR. R. C. Wofinden is succeeding Dr. R. H. Parry as Bristol's medical officer of health. Dr. Parry retires at the end of January.

THE British Medical Association's Scottish office removed to 6 Drumsheugh Gardens, Edinburgh, on January 23.

THE Rt. Hon. Iain Macleod, M.P., Minister of Labour and National Service, has appointed Mr. I. S. Dewar to be his assistant private secretary in succession to Mr. G. A. Brand.

FOLLOWING the move to a new factory in Queensferry, North Wales, turnover of Neatex Products, Ltd., has increased by 47 per cent., it was stated at the company's annual sales conference in Liverpool recently.

FRED Hurtley & Son, Ltd., manufacturers of Litesome supporters, have cpened a new factory at Riddlesden, Keighley, Yorks, for the manufacture of sportswear.

PROFESSOR O. Schaumann, Innsbruck, Germany, is lecturing at St. Thomas's Hospital medical school, Albert Embankment, London, S.E.1, at 5 p.m. on March 14 on "Some New Aspects of the Action of Morphine-like Analgesics." Admission is free, without ficket.

FORTY members of the supervisory grades of the production units of Genatosan, Ltd., held their first annual party at Old Woodhouse, nr. Loughborough, recently. Among those present were Messrs. C. H. Noton (managing director) and G. R. Henderson (works manager).

BERKSHIRE Executive Council is satisfied that Maidenhead chemists' shops on late-closing rota are usually open substantially later than the scheduled time, and that existing arrangements are adequate. Complaints had been made alleging that late-closing chemists were closed when patients left doctors' surgeries.

AVERAGE trading profit in 1954-55 of ten retail pharmaceutical companies increased by 17·7 per cent. over the previous year, according to figures published by the research department of the Union of Shop, Distributive, and Allied Workers. A closely similar increase took place in footwear. Furnishing and iewellery profits increased by 20·6 and 27·2 per cent. respectively. All other retail trades showed a smaller increase than pharmacy except butchery, in which there was a decrease.

COLONEL H. W. Mulligan (deputy director, Wellcome Research Laboratories, Beckenham, and head of the biological division) has been seconded by The Wellcome Foundation, Ltd., to assist Lieutenant-General Sir Bennett Hance, who is in Ceylon to advise the Ceylon Government on its medical and public health services. Sir Bennett Hance's visit is being made at the express request of the Ceylon Government under the Technical Co-operation icheme of the Colombo Plan.

TOPICAL REFLECTIONS

By Xrayser

Drug Testing

The tables published in connection with the drug-testing scheme (pp. 56-58) raise innumerable questions, since statistics of all kinds are open to differing interpretations. As a straightforward statement of samples taken and samples referred, it presents no argument. The facts in Table VIII are quite clear, in that 7,273 tests were made and 639 were referred for comment. Perhaps among your readers there is someone with a flair for statistics who can answer one of my questions. In the sampling under notice, mixtures and gargles (i.e., liquid medicaments) accounted for no fewer than 5,101 items out of the total of 7,273—equal to 70 per cent. of the total, while tablets, at 657, represented only 9 per cent. I am not attempting to cast any doubt whatsover on the facts as stated in the report, but would the picture be the same if samples taken bore a closer relation to the incidence of those items dispensed in actual practice? I have not at hand a table showing the ratio of liquid preparations as compared with tablets over the country as a whole, but my impression is that mixtures and gargles do not outnumber tablets in the proportion of 70 to 9. Is there a case for attempting to apportion the tests on the basis of incidence? It seems to me that the all-over picture of accuracy should bear some relation to actual conditions.

Business Methods

The meeting of the Council of the Pharmaceutical Society of Ireland, reported on p. 71, provides matter for thought in the suggestion that some kind of business training is essential for students in pharmacy. The days are gone when the easy philosophy of Mr. Micawber sufficed. Happiness and misery still bear a relation to income and expenditure, but some form of keeping books and accounts is required in order to ascertain the degree of those two emotions. The college may feel, with some justification, that one of the reasons for apprenticeship is that the student can acquire a basic knowledge of business methods on the spot, as it were, in surroundings which are first-hand and practical. Such a belief presupposes that the apprentice-master himself has a passing acquaintance with day-books and ledgers, cheque-books and journals, and by and large that may be so today. I am not sure that I would agree that the technical school is the best place for such training, or at least that it should be taught as part of the pharmacy course. I think that the Irish Society's president (Mr. P. F. McGrath) was on the right lines when he suggested that, during the first year, students should be told of the advantages of attending a commercial course, and that that could probably be done after qualifying. One or two evenings per week would cover the fundamentals in a session, and THE CHEMIST AND DRUGGIST periodically publishes useful articles on the subject for the guidance of its readers. It seems unlikely that commercial subjects will ever find a place in the examination syllabus.

The Bee-loud Glade

W. B. Yeats would, one feels, have had sympathy, understanding and envy for the position of "Coelacanth" (p. 68) who has found compensation in the simple life. "Nine bean rows will I have there, a hive for the honey-bee," sang Yeats; and the peace which your contributor has found is reward for his courageous struggle back to health. Retirement for the pharmacist is not easy. It involves, in many cases, a big decision, which is spared to the man who knows the security of superannuation and who frequently longs for the appointed day. Those who have reached retiral age are of the vintage which knew long hours and little leisure to cultivate hobbies, but they have earned the rest and peace which your contributor has found. His philosophy is admirable, and he is making a success of retirement—much more difficult to attain than success in business, and, one imagines, much more satisfying when success is achieved in the face of having to count every penny.

COMMITTEE OF PUBLIC ACCOUNTS

Evidence given of threepenny "margin" on Scottish prescriptions

MR. H. R. SMITH (secretary, Department of Health for Scotland) told the Committee of Public Accounts on July 12, 1955, that in Scotland the "apparent margin" per National Health Service prescription was just over three-pence. That is revealed in the report of the Committee of Public Accounts, Session 1955–56, containing minutes of evidence, and published on January 20.

Mr. Smith was being questioned on the remuneration of Scottish chemists. MR, T. STEELE (a member of the Committee) asked what the profit was on the National Health Service per pre-scription. Mr. Smith said that the report of the accountants, who were investigating the chemists' remuneration, showed an apparent margin per prescription that might or might not be a real margin. The chemists on the one hand might say that it was legitimate profit, the Department might look at it another way. It was also fair to say that the investigation covered the position in 1952 to 1953. Costs had risen since that date. The report in which the figure had been given had been a joint report submitted to the Department by the Board of Trade accountants and the chemists' own accountant

Margin or Profit?

MR. J. S.-W. ARBUTHNOT asked what was the difference between a margin and a profit. MR. STEELE asked for further information about the margin. MR. SMITH said that the chemists might say that it was not a true margin because the figures were taken in 1952-53. The Department was not satisfied that it was a true margin because if the chemists were able to buy on more favourable terms than the Tariff wholesale prices, that margin would be threepence plus something. All that the investigation to date could show was that after allowing for all the relevant charges, there was an apparent margin of over threepence per prescription.

MR. STEELE: I take it that when the investigation is completed it will be able to show the profit on the National Health Service. MR. SMITH: Yes.

MR. G. Benson (chairman of the Committee): When you say that the profit is threepence per prescription, does that mean after all overheads and rents and everything have been taken off? MR. SMITH: That is so. I think the figure allows for 5 per cent. on

working capital.

MR. J. H. Hoy (a member of the Committee) questioned the remark of Mr. Smith that costs had risen since the report was made. MR. SMITH reiterated that the investigation was based on circumstances in 1952 to 1953. Dispensing salaries had risen since then. The Department hoped to arrive at a settlement some time in 1955. There would probably be some advantage in tying it up with the English settlement, so that there could be a comparative assessment of position in the two countries. Mr. Smith told Mr. Arbuthaot that at the beginning

of 1953 the average cost per prescription was 5s. 3·67d. [A note by Mr. Smith in the report says that the surplus of threepence per prescription is arrived at after including in the expenses 5 per cent, on working capital.]

MR. Hoy asked what the English

MR. Hoy asked what the English chemists made per prescription. SIR JOHN HAWTON (secretary, Ministry of Health) said that his Department was not quite sure yet. That was one of the things they were trying to get out of the Whitley investigation, but as usual Scotland was slightly ahead.

THE CHAIRMAN asked about the position of discussions with the industry on the cost of drugs. SIR JOHN HAW-TON said that he was not very optimistic that rapid progress would be made. If the Department did anything rash or silly, which damaged the industry seriously, there was not merely the loss of exports, but a great increase of imports, because if the country had not got a flourishing industry it would have to import. One could not just descend on a proprietary-making firm and say: "We want to know what profit you make, and you can't make more than so and so," because they were all tied up with so many considerations and come of them indeed. siderations and some of them, indeed, were subsidiaries of firms in other countries. Sir John told Mr. Arbuthnot that at all stages the matter was decided at the Ministerial level and the Department was under instruction to go very carefully into the industry's proposals and make sure that the Department did not blunder.

Assuming Too Early

THE CHAIRMAN: Is there no possibility of approaching the matter from an entirely different angle, such as getting an annual rebate from those people? SIR JOHN HAWTON: How do you mean? THE CHAIRMAN: I am suggesting that there is no reason why the firms should not compound their high profits by paying the Department something at the end of the year. SIR JOHN HAWTON: Forgive me, but are you not now assuming before you have had your investigations, that the prices are too high, if you ask for a rebate?

THE CHAIRMAN: I am only looking at the figures of 60 per cent, on selling price and 100 per cent, on capital, which strike me as very high. SIR JOHN HAWTON: On a particular preparation, not a general indication.

THE CHAIRMAN: There are three firms who produced a reduction of £850,000 a year. The position does look as if there was an enormous amount of water that could be squeezed out, if we knew how to do it, SIR JOHN HAWTON: We are trying to do that.

The allowance to cover risk of loss from unpaid levy charges was discussed. MR. A. T. JONES (Treasury) told the chairman that the overpayment on allowances to cover risk of loss from unpaid charges to chemists had been about £100,000. SIR JOHN HAWTON said that the matter was simply part of the whole question of chemists' remuneration.

THE CHAIRMAN: The fact that you have evidence that you have been seriously overpaying them does not mean that you immediately cut the payment? SIR JOHN HAWTON: It does not mean that we just override the Whitley machinery and cut it immediately, but it does mean that we make a strong point of it in our negotiations. We should do our best to get an early decision on it. There are also a number of other things, you see, like container allowances and other problems.

Fair Remuneration Essential

The Scottish Drug Tariff was discussed. Mr. C. N. THORNTON-KEMSLEY said that the Treasury minute on the First, Second and Third Reports from the Committee of Public Accounts, Session 1953-54, had said that the special tariff methods were a relatively minor factor. What did that mean? MR. F. E. FIGGURES (Treasury) said that what really mattered was that the remuneration of the chemists both in Scotland and in England and Wales should be fair. Provided that was achieved, it did not matter whether it was achieved by having precisely an identical piece of paper for establishing the tariff. If somebody wanted to have the odd excrescence in one which was not in the other, provided that in the balance justice was done between two parties, it did not seem to the Treasury that it was a major point of principle. If the Scottish chemists were given a little more into the pocket of the use of drugs and a little less into the pocket of skill and expertise that did not seem to the Treasury to matter. What did matter, was that the end price was right, not the individual items of the bill.

Economy in prescribing was discussed. THE CHAIRMAN said that it was interesting that the proportion of proprietary prescriptions from 1950 to 1953 rose by 50 per cent., whereas the proportionate cost of those proprietary prescriptions only rose by 30 per cent. Did that mean that the Department's propaganda had had the effect of cuting out the more expensive? SIR JOHN HAWTON said that he hoped that it was a sign in the right direction. Sir John Hawton told Mr. Arbuthnot that the cost to the Exchequer of Health Service prescriptions in 1954–55 was £43 millions. Mr. Arbuthnot: So there is a big field for economy here? SIR JOHN HAWTON: Oh yes, this is one of the biggest headaches of the Health Service, I have always said and always will.

MR. ARBUTHNOT asked what the economy would be if the Department could insist on the doctor using the cheapest drug, not therapeutically inferior, whether it was a proprietary or Formulary preparation. SIR JOHN HAWTON said that one could not attempt to give an estimate in figures, but he did not think that, if the Department had the power to say "no" completely, the economy would be very big in money.

BRITISH POLIOMYELITIS VACCINE

Local authority vaccination scheme; doctors may get supplies later

THE development of a British poliomyelitis vaccine was announced by Mr. R. H. Turton (Minister of Health) at a Press conference held in London

on January 19.

Its production, said THE MINISTER, was due to the skill of two British manufacturers (Glaxo Laboratories, Ltd., and Burroughs Wellcome & Co.), working in co-operation with the Medical Research Council. The vaccine would be subject to the most stringent safety tests and should afford a considerable measure of protection

against paralytic poliomyelitis.

Mr. Turton said that he believed that the British vaccine was preferable to any made in any other country.

None was being imported.

Supplies would not be available in substantial quantity until the end of the year, but limited amounts should be available during May and June and it was hoped that it might be possible to inoculate between a quarter and half a million British children aged between two and nine, the range of ages at which the incidence of poliomyelitis was highest. There were were were will be aged to the possible of the possible to million children in those age. nearly six million children in those age groups. Detailed plans were sent on January 19 by the Ministry to all local health authorities, who will be responsible for the local arrangements. The scheme would be completely voluntary. It was likely that the number of children for whom applications were made would be greater than could be dealt with by the limited supplies likely to be available before the end of June.

No vaccinations, July-October

There would be no vaccination between July and October when poliomyelitis was most prevalent. Those who could not be vaccinated before July, however, would receive priority when vaccination was resumed towards the end of the year. At a later stage it was hoped to extend the age groups to be offered vaccination. He could give no date when vaccination could be completed. The Government would buy all the vaccine that could be produced within the first twelve months. He could not commit himself beyond that. It would be for each local health authority to decide whether it wished to take part in the scheme. The public would have to wait for local announcements. General medical practitioners would be given an opportunity to participate at a later stage when larger supplies became available.

The Minister referred to the fall in the death rate from diphtheria since immunisation began in 1934—from 4,085 deaths in that year to eight in 1954—and said "let us hope that we are going to experience a similar triumph of preventive medicine in the

right against poliomyelitis."

PROFESSOR S. P. BEDSON (chairman of the "safety" committee of the Medical Research Council) said that the British vaccine differed from the Salk vaccine in that the highly virulent (Mahoney) type I strain of the virus used in the American vaccine had

been replaced in the British vaccine by a strain of lesser virulence (the Brunhilde strain). It was hoped eventually to replace the type II and III strains also with strains of lesser virulence.

SIR JOHN CHARLES (chief medical officer, Ministry of Health) gave an assurance that ample supplies of mon-keys were available. Professor Bed-SON said that work was going on in America to discover an alternative method of cultivation of the virus.

PROFESSOR BEDSON said that no tests of the vaccine had been made on man, but only on monkeys and mice. The tests were those that his committee had drawn up. He was satisfied that if the vaccine passed the tests laid down it would be safe.

MR. TURTON said that he did not know how much the companies concerned had spent on research. Negotiations between the Ministry and the manufacturers on costs were not complete. He could give no estimate of the costs of the vaccination programme. They would appear in his Department's estimates for 1956-57. He could not anticipate those. Local authorities would get the vaccine free and a 50 per cent, grant towards other costs.

PROFESSOR BEDSON suggested that it would be three years before an attenuated live vaccine could be practicable.

LEGAL REPORTS

First "Mind Pills" Prosecution

In the first case of its kind under the Pharmacy Acts, London Co-operative Chemists, Ltd., Maryland Street, Stratford, London, were summoned by the Pharmaceutical Society at Marylebone magistrates' court on January 11 for unlawfully selling methyl pentynol at their branch at 107 Edgware Road. The charges were that they sold Oblivon consuler to a person not known as a few capsules to a person not known as a fit and proper person to be supplied; sold them without making a proper entry in a register and without securing the customer's signature; and sold them in a container not labelled with the name and address of the seller. Society's solicitor said that, in selling the poison, a chemist must either know the customer as a fit and proper person or have a certificate from a householder whom he knew that the customer was a proper person. During the past year or two a great deal of publicity had been given, said the solicitor, to what had been described by the Press as " mind There was a general tendency in this country and, he thought, America, to buy those pills to relieve nervous tension. Oblivon capsules were one such product. The Home Secretary, under an Order that came into effect in August 1955, had made it necessary for a chemist to know the purchaser as a fit and proper person to be sup-plied. That also applied to the "confidence drug " amphetamine and others. Methyl pentynol and those other drugs were not poisons that would take life like arsenic, cyanide and strychnine, but the Pharmaceutical Society had been concerned at the number of sales of those drugs brought to their notice in disregard of this new Order, and were alarmed by the way those medicaments were purchased by the public. The Society deplored the fact that juveniles were buying them, and was bringing its prosecution for the protection of the public. He did not say that the sale in the present case was deliberate. It was obviously made accident-ally by a young lady. But it was an important case from the public point of view, because that type of drug was on the increase. Defending solicitor said that Oblivon tablets had been on the market for a considerable time and could at one time be purchased just

like aspirins. Because there had been some difficulty about some youths who overdid the use of them they had been put under Schedule I on August 15, Owing to an oversight during holidays, the girl assistant who sold the capsules was not told that they had been put under Schedule I. drug was not, in fact, habit-forming or anything like that. The magistrate fined defendants £5 on each of the three summonses with £3 3s, costs.

D.D.A. Fines

At Hinckley, Leics, magistrates' court, recently, Joseph Austin Fairclough, M.P.S., Hinckley Road, Barwell, pleaded guilty to charges under the Dangerous Drugs Act of failing to enter a sale in the register and failing to mark on a prescription the date on which it was dispensed. The prosecu-tion alleged that when Fairclough was shown a prescription which did not bear the required date, he said he did not bother as the doctor had already entered the date and that was the date he dispensed the prescription. Fairclough told the court that the offence happened during the week before Christmas when he dispensed about 400 prescriptions and did four times the normal shop business. It was his practice, he said, to date-stamp prescriptions as they were dispensed. The bench considered that a genuine mistake had been made and imposed a fine of 10s. in each case. No evidence was offered on a further summons alleging that Fairclough issued prescriptions without being acquainted with the signature of the person by whom the prescriptions were purported to have been given.

Theft from Employer

A FINE of £3 was imposed at Market Harborough, Leics, magistrates' court, recently, on William Ernest Graham, 53 Logan Street, Market Harborough. who pleaded guilty to stealing a coffret of soap and powder valued at 3s. 6d. from the local branch of Boots, Ltd., at which he had been a porter for ten years. He asked that a theft of 15s. should also be taken into consideration, saying he had taken the money in odd half-crowns from the shop till.

PURCHASE-TAX-FREE DRUGS

New Order exempts recently introduced preparations

Trew Order exempts recently introduce						
Chemical or Drug	Proprietary or other name	Maker				
Head II						
Acetazolamide, and salts	Diamox sodium	Lederle				
N-(6-Acetoxythymyloxyethyl)dimethylamine	parenteral Opilon	Veritas				
hydrochloride 3-(2-Acetyl-1-p-nitrophenylethyl)-4-hydroxy-	Synthrone	Geigy				
coumarin Acetylaminonitrothiazole	1					
Aminometradine	Mictine	Searle				
Amiphenazole, and salts	Daptazole	Nicholas Nicholas				
Bemegride Chlorine substituted 8-hydroxyquinoline	Megimide Tarquinolor	Squibb				
with coal tar Chloro-tri-(p-methoxyphenyl)ethylene	Tace	Riker				
Di-(2-chloropropyl)-2-naphthylamine with	2400	Boots				
urethane 2-(2-Diethylaminoethoxy)ethyl-1-phenylcyclo-	Toclase	Pfizer				
pentane-1-carboxylate citrate, whether or	2001430					
not mixed with menthol	Valmid	Lilly				
1-Ethinyl-cyclohexyl-carbamate Glutethimide	Doriden	Ciba				
1-(p-Hydroxyphenyl)-2-(1'methyl-3'-phenyl-	Dilatal	Smith & Nephew				
propylamino)propanol hydrochloride beta-Mercaptoethylamine, and salts	Becaptan	Horlicks				
Piperazine, and salts thereof, prepared for	2					
anthelmintic use						
Head III						
Benactyzine, and salts thereof N-Benzyl-N-phenoxyisopropyl-beta-chloro-	Suavitil Dibenzyline	Glaxo Menley & James				
ethylamine hydrochloride						
Cortisone and analogous steroid hormones and esters	Deltacortil	Pfizer				
Dextromethorphan, and salts	Romilar	Roche				
3:3-Diethyl-2:4-dioxo-5-methylpiperidine 6:7-Dimethoxy-1-(3:4:5-triethoxyphenyl)	Noludar Octaverine	Roche Ward,				
isoquinoline		Blenkinsop				
2:3-Dimethyl-1-phenyl-pyrazol-5-on-4-yl-N- methylamino-methane sulphonic acid	Novalgin	Bayer				
sodium salt						
Dipipanone hydrochloride 1-o-Methoxyphenyl-2-methylaminopropane	3 Orthoxine	Upjohn				
hvdrochloride						
3-Methyl-2-phenylmorpholine hydrochloride 10-(N-Methyl-3-piperidylmethyl)phenothiazine	Preludin Pacatol	Pfizer Warner				
Oxyethylated tert-octylphenolformaldehyde	4					
and mixtures thereof with both sodium bicarbonate and glycerin		Y				
Pentaerythritol tetranitrate	Peritrate with phenobarbitone	Warner				
	Pentyoxylon	Riker				
Piperazine-1-carbodithioic betaine	Safersan 5	Boots				
alpha-(2-Piperidyl)benzhydrol hydrochloride Pyrazinamide	3	Merck-Sharp &				
	5	Dohme				
Tetradeca- or hexadeca-methylene bisquino- linium salts; tetradeca- or hexadeca-						
methylene bisisoguinolinium salts	Tyzanol	Pfizer				
2-(1;2:3;4-Tetrahydro-1-naphthyl)iminazo- line hydrochloride		1				
Theophylline with choline	Benztropine	Merck-Sharp &				
Tropine benzhydryl ether, and salts	methane	Dohme				
1-(p-Chlorobenzhydryl)-4-(p-tert-butylbenzyl)	sulphonate Vivazine	Pfizer				
piperidine						
3-Dimethylamino-1-phenyl-1-(2-pyridyl) propane	Pyriton	А. & Н.				
Meclozine	Ancolan	B.D.H.				
1 A veterinary product.						

1. A veterinary product.

2. Redefinition of previous entry thus permitting exemption for additional salts or compounds,

New name for previous entry.

4. Previously under head II.

5. Not yet on market.

THE Purchase Tax (No. 1) Order, 1956 (S.I. 1956, No. 27) extends the list of essential drugs and medicines exempt from purchase tax under the Purchase Tax (No. 6) Order, 1954 (S.I. 1954, No. 1608) which is now revoked. All drugs and medicines previously exempt under the revoked Order remain exempt under the new Order.

The Order applies to goods which are dispatched for sale on or after

January 23.

Substances exempted for the first time or redefined under a new title are given in the adjoining table.

DEATHS

ADAMS. — On January 10, as a result of an accident, Mr. Thomas Wilfred Adams, Abbey House, Coupar Angus, Perthshire, formerly of 1 Gilmourton Crescent, Newton Mearns, Glasgow, aged seventy-two. Mr. Adams qualified as a chemist and druggist in 1907.

BARLOW. — Recently, Mr. Joseph Alexander Barlow, M.P.S., 59 Ighten Road, Burnley, Lancs, aged eighty. Mr. Barlow began his apprenticeship in his father's shop at the Mitre, Burnley, later opening shops at Gannow and in Oxford Road. He is survived by his widow.

BOOTH. — On December 31, Mr. Alexander Booth, M.P.S., 41 Duff Street, Macduff, Banffs. Mr. Booth qualified in 1924.

COLES. — On January 11, Mr. Charles Avery Coles, M.P.S., St. Mary's Cottage, Debenham, Suffolk, formerly of Anstey Gate, Little Green, Earl Soham, Woodbridge, Suffolk. Mr. Coles qualified in 1899.

COPLAND. — At his home, St. Joseph's, Aboyne Avenue, Causewayhead, Stirling, on January 10, Mr. John Copland, M.P.S., aged seventy-three. Mr. Copland was in business at 18 Strathmore Drive, Cornton, Stirling. He is survived by his widow, four sons and three daughters.

MORGAN.—On January 6, Mr. William Richard Morgan, M.P.S., Plasgwyn, High Street, Rhymney, Mon. Mr. Morgan qualified in 1909.

RAMSBOTTOM. — On December 31, Mr. Bertram Ramsbottom, M.P.S., 1 Watkin Lane, Lostock Hall, nr. Preston, Lancs, aged fifty-nine. Mr. Ramsbottom was superintendent and a director of Bert Ramsbotttom, Ltd., Lostock Hall.

SHAW.—Recently, Miss Anne Shaw, M.P.S., 62 Maple Grove, Triangle Estate, Handsworth, Sheffield, 9, aged seventy-three.

TAYLOR. — Suddenly, on January 17, Mr. William Godfrey Taylor, M.P.S.N.I., Lyn-Crest, Armagh Road, Newry, and the Medical Hall, Markethill. Mr. Taylor was registered as a druggist in Dublin in 1922, and as a pharmaceutical chemist in Northern Ireland in 1930. He is survived by hi widow.

OVERSEAS TRADE IN 1955

Chemical and pharmaceutical exports higher

THE total value of United Kingdom exports in 1955 was £2,905 millions which represented an increase of 8½ per cent. over 1954 compared with a rise of 3½ per cent. between 1953 and 1954. The volume of shipments rose by approximately 7 per cent. in 1955, the remainder of the increase in value being due to higher export prices. The annual figures of 1954 and 1955 were, however, affected by shipments delayed from 1954 into the early months of 1955 by the October 1954 dock strike, and the Board of Trade estimate that when allowance is made for the foregoing the underlying rate of increase in value in each of the two years was

probably much the same at between 5 and 6 per cent. Re-exports, totalling £119 millions were 18 per cent. more than in 1954. Imports were valued at £3,886 millions or 15 per cent, over those in 1954 whilst the volume rose by approximately 12 per cent. The visible trade deficit (imports valued c.i.f., exports and re-exports valued f.o.b.) amounted to £862 millions, an increase of £263 millions over 1954.

Exports of chemicals during the year were considerably higher than in 1954; the monthly average for the fourth quarter, at £20 2 millions, was nearly £1½ millions higher than the monthly average for the preceding six months.

EXPORTS DECEMBER 1955 YEAR 1955 1954 Drugs, medicines, medicinal preparaf. £ tions (total) ... 3,364,351 35,896,600 32,096,482 Quinine and its salts 25,106 220,332 251,170 . . . Proprietary medicines 888,907 9,661,671 8,412,871 104,173 1,048,043 898,728 Aspirin 522,349 Insulin 43,753 532,758 Penicillin Salts 108,576 1.343.316 1,691,797 Salts ...
Injections 1,136,342 68,458 45,393 825,995 ... Tablets, lozenges, ointments ... 550,453 529,921 Antibiotics other than penicillin 4,117,823 682,485 5.218.154 974,734 653,610 Antipaludics 105,618 1,848,329 Sulphonamides 1,559,623 131,708 2,159,780 Vitamins 322,091 2,841,352 ... Alkaloids, excluding quinine 79,667 808,095 847.360 Barbiturates 37,967 541,527 576,302 Antihistamines 31,511 491,983 452,158 31,101 429,109 580,646 Acetone Citric acid 324,097 288,781 27,802 3,948,481 Detergents 585,428 6,658,681 ... Disinfectants, sheep dips, etc. Insecticides, fungicides, etc. 75,929 1,358,265 1,531,492 ... 389,703 4,227,650 3,442,267 Spirits, perfumed ... 761,972 52,515 684,276 116,931 Glycerin ... Essential oils, natural 450,249 299,362 578,510 450,663 61.110 Toilet preparations Lipsticks, face powders, etc. 248,880 3,005,035 2.581.461 Dentifrices ... 160,886 1,772,443 1,586,648 Toilet soaps 222,161 2,678,461 2,331,244 RE-EXPORTS DECEMBER 1955 **YEAR 1955** 1954 15,320 236,987 290,086 55,419 657,447 747,771 Essential oils ... 74,460 495,820 811,866 **IMPORTS** DECEMBER 1955 YEAR 1955 1954 Borax ... 39,275 895.082 932,866 ... Iodine ... 1,490 592,124 542,955 Menthol 28,074 409,289 216,739 Vitamins 136,140 1,779,099 1,404,217 Antibiotics 23,803 437,784 3,960,824 59,759 38,596 Alkaloids 1,508,177 1,117,607 . . . Proprietary medicines 464.278 484,207 2,697,678 Other prepared medicines ... 324,038 3,486,837 Essential oils Bergamot ... 29,796 255.839 166,495 Clove 6,910 215,678 181,346 Lavender 53,997 334,644 599,581 Lemon 104,175 752,197 796,521 Orange 11,400 232,396 153,463 Peppermint ... 77,996 1,098,411 1,267,152 Unclassified 381,460 3,264,914 2,568,689 Tragacanth ... 72,506 371,285 322,111 Acacia ... 63,445 1,407,004 1,123,911 Ipecacuanha root 10,781 295,795 410,399 471,052 Beeswax 59,126 615,885 ... Carnauba, candelilla waxes 82,533 894,375 935,477 ... Shellac, seedlac, etc. 241,110 2,102,543 1,736,554 Drugs, medicines and medicinal preparations, with a few exceptions, were higher as may be seen in the accompanying table. Sulphonamides in bulk, recorded separately from the foregoing also increased from £740,000 to £1,026,000.

Australia continued to be Britain's best customer for prepared medicines, etc., the December purchases being particularly heavy at £613,508, bringing the total for the year to just over £4 millions. India was the next with purchases valued at just over £3 millions. Purchases of such goods by Australia have stepped up by approximately £1 million each year during the past three years, whilst India's have been comparatively stable.

Most countries show some increased purchases in 1955 but the United Kingdom lost ground in France, Greece, Indonesia, the Argentine, the Netherlands, Singapore and Ceylon.

NEW COMPANIES

P.C. = Private Company; R.O. = Registered Office.

J. & M. JONES, LTD. (P.C.).—Capital £1,000. To carry on the business of retail chemists, druggists, opticians, etc. Directors: John Jones, M.P.S. and Mary Jones, Hotspur Lodge, Hanger Lane, Ealing, London, W.5.

WAXES, LTD. (P.C.). — Capital £2,000. To carry on the business of general merchants in oils, waxes, chemicals, drugs, etc. Directors: Anthony J. Green and Clifford Boughton. R.O.: 17 Albemarle Street, London, W.1.

H. C. MOORE, Ltd. (P.C.).—Capital £4,000. To carry on the business of wholesale or retail chemists, etc. Directors: Herbert C. Moore, M.P.S., and Harry Gregory, M.P.S. R.O.: 8 The Green, Darlaston, Wednesbury, Staffs.

HEDLEYS LABORATORIES, LTD. (P.C.).—Registered in Dublin. Capital £10,000. To carry on the business of photographic chemists and druggists, etc. Directors: Dermot V. Dolan, Brackenlea, Baily, Dublin, and Victor V. Alberici.

OLIN MATHIESON, LTD. (P.C.).
—Capital £30,000. To carry on the business of chemists, importers, exporters and manufacturers of chemical products, etc. Directors: John R. Robinson, Chas. S. Dennison (managing director, E. R. Squibb & Sons, Ltd.), Thos. S. Nichols, Maryland, U.S.A. (president, Olin Mathieson Chemical Corp.), and Stanley De Jongh Osborne, Connecticut, U.S.A. (executive vice-president, Olin Mathieson Chemical Corp.). R.O.: 17 Old Bond Street, London, W.1.

Company News

PARKE, DAVIS & CO., Detroit, U.S.—Mr. Harry J. Loynd (president) said in a year-end statement that the company's sales rose approximately 12 per cent. in 1955 over the previous year. During 1956, he estimated, sales will "enjoy a favourable increase" over 1955 and said major research efforts of the company would be in antibiotics, cancer, cardiovascular and mental disorders, and viruses. Plans to build a \$10,000,000 medical research centre in Detroit have been announced.

AIDS TO PRODUCTIVITY

Head Telephone Set.—For works or office telephone operators who have to be continuously listening and to have their hands free for transcribing messages or plugging-in, a light, comfortable and elegant self-contained head set is produced by Standard Telephones & Cables, Ltd., Oakleigh Road, New Southgate, London, N.11. The plastic nylon moulding incorporates transmitter and receiver. A light plastic horn conveys sound from the operator's lips to the transmitter. The wire headband has a flexible pad for comfort.

Drawerless Filing Cabinet.—A filing cabinet produced to a new principle and giving economies in space is the



Tipdex made by Tipdex, Ltd., 28 Martin's Lane, London, E.C.4. The design is claimed to overcome weaknesses of standard systems. The four-drawer foolscap cabinet is 54 in. high, 33 in. wide and 13 in. deep. Its total filing capacity is 92 in.—10-12 in. more

than the average conventional filing cabinet, and it requires only 4 sq. ft. of floor space, against the 6 sq. ft. of standard types. The cabinet when fully open takes up only 19 in. of depth room. Files remain in the cabinet when the "drawers" are open, and all or any combination of the four drawers may be open at the same time, with all titles on the folders in clear view. The cabinet cannot topple forward. Stretching to reach files is eliminated, since the internal front-to-back measurement is only $11\frac{1}{2}$ in. The problem of getting the four drawers to operate in a height of 54 in, while maintaining the 92 in, capacity has been resolved by chamfering the four corners and slightly inclining the bottom of the drawers downward. The chamfering gives added strength. The cabinet is virtually dust-proof. There are no suspension arms, and wear and flattening of ball bearings are thus eliminated. When the drawer is tilted forward the weight of drawer and contents is directed in the opposite direction, keeping the centre of gravity well inside the cabinet

Multi-way
Talkie, Ltd., have redesigned their
"two-way talkie" loudspeaking intercommunicating telephone system and
introduced a new simple "all master"
system. The standard "two-way talkie"
can be extended to four stations by
using one master set, but direct communication between the subunits is not
possible. The new "all-master"
system enables any station to talk
with any other station. The instrument is unique in providing loudspeaker intercommunication without
the use of valves or electric mains.
Operation is by two U2 torch batteries which last four to six months.
The sets are self contained in metal
cases and finished grey with silver
grille or ivory with gold grille. The
sole distributors are Broughtons Commercial Services. Ltd., 10 Victoria
Rise, London, S.W.4.

Cash Tickets and Audit Roll.-The Westinghouse Garrard Ticket printer, recently put on the market, prints and issues in triplicate if necessary tickets, receipts, dockets, vouchers, etc., from a plain or coloured roll of paper and simultaneously records an identical copy on an audit roll locked in the machine. A non-resettable printed total can be obtained by an authorised person only. The machine is provided with two series of levers, one for recording a sterling or decimal value and a second for registering "non-addiinformation, such as customer number, code number, etc. To issue the ticket the operator sets the levers and turns a handle. Each ticket and audit-roll copy is printed with a fivedigit consecutive number, an operator's code letter, a date, and a machine number. Tickets can vary in length from $1\frac{1}{2}$ in. to $4\frac{1}{4}$ in. and can contain advertising slogans, conditions, etc. The machine is supplied as ticket- or receiptissuing cash register with machine-operated cash drawer. Models in grey and black are available. The machine is marketed by Westinghouse Garrard Ticket Machines, Ltd., 82 York Way, London, N.1.

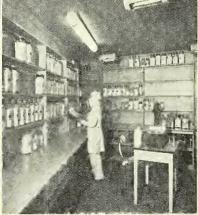
LIGHTING

Fluorescent Lighting Fittings.—A "complete service in fluorescent lighting" is offered by Morley's Electrical Services (Holloway), Ltd., 117 Hornsey Road, London, N.17. The company's Morlite equipment is guaranteed for two years. A catalogue folder is available from the company. A newcomer in the manufacture of fluorescent lighting fittings is Stella Lamp Co., Ltd., 37 Oxford Street, London, W.1, who have just issued a descriptive list of their Blue Label range.

Brightness by Numbers.—In the past it has often been impossible to know the effect of lighting fittings or built-in lighting upon a finished interior. Under a system outlined recently by Mr. J. M. Waldram, B.Sc., A.M.I.E.E., F.I.E.S. (president of the Association of Public Lighting Engineers and past president of the Illuminating Engineering Society) at a conference on electric lighting held recently in London, each gradation of light and shade is given a figure to which the lighting engineer can work, translating the architect's ideas into terms of actual lighting application.

Special Lighting for Skin Patients.-Examination and treatment of hospital patients suffering from skin complaints demands lighting comparable in colour rendering to natural daylight, but far higher in intensity than normal ward Since a patient, however, lighting. would find such an intensity uncomfortable for reading, the GENERAL ELECTRIC Co., LTD., Kingsway, London, W.C.2, designed a special dual-purpose lighting fitting for use in the Skin Department of the Western Infirmary, Glasgow. The fitting is wall mounted over the bedhead, and consists of a semi-circular sectioned sheet steel reflector pivoted on conduit brackets so that a nurse can rotate it through 180°.





LAMINATED PLASTIC BENCH TOPS: Left: One of the conveyor packing counters, used for the assembly, labelling and packing of a bottle pack in the factory at Braydon Road, London, N.16, of the International Chemical Co., Ltd. All the conveyor-belt tables, bench tops and other working surfaces are surfaced with Warerite plastics, manufactured by WARERITE, LTD., 12 Grosvenor Gardens, London, S.W.1. Right: Bulk powder store of the Distillers Co. (Biochemicals), Ltd., Spcke, Liverpool, 19, in which ceiling, walls and shelving, working surfaces and all remaining vertical surfaces are veneered with buff "linette" Formica laminated plastic, manufactured by THOMAS DE LA RUE & CO., LTD.

TRADE NOTES

Immediate Deliveries of Cortisone.—Roussel Laboratories, Ltd., 845 Harrow Road, London, N.W.10, offer immediate deliveries of Cortisyl, Roussel, brand cortisone and Hydrocortisyl, Roussel, brand hydrocortisone.

Now Tax-free.—Roche Products, Ltd., 15 Manchester Square, London, W.1, announce that under the Purchase Tax (No. 1) Order, 1956, operative since January 23, 1956, Romilar cough syrup and Noludar tablets are exempt from tax.

Film Library Addition.—Bannister's victory over the Australian Landy in the "golden mile" at the 1954 Empire and Commonwealth Games, Vancouver, Canada, and the marathon of Jim Peters, in which he collapsed a few yards short of the winning line, are among sports events shown in the forty-minute official film of the games now being distributed on 16-mm. by the G.B. Film Library, Aintree Road, Perivale, Middlesex.

Discontinued.—Boots Pure Drug Co., Ltd., Nottingham, have discontinued issuing all sizes of Hexanastab brand hexobarbitone tablets, B.P., 0·25 gm.; and penicillin suspension (oil wax), oily injection of penicillin, B.P., calcium salt, 125,000 and 300,000 international units per c.c. (rubber-capped vials). — Genatosan, Ltd., Loughborough, Leics, state that they have discontinued the sale of Fissan products except ichthammol powder, which is continuing for the present to be supplied (in sprinkler tins only).

Cash Prizes for Slogan Verses.—In what is claimed "the most powerful promotion campaign ever undertaken for such a product," Smith & Nephew, Ltd., Bessemer Road, Welwyn Garden City, Herts, offer cash prizes of £500, £250 and £100, plus 300 consolation prizes, in a Nivea Blue Velvet hand lotion slogan-verse competition. In addition there are cash prizes of £50, £25 and £10 for the chemists who sell Blue Velvet to the three principal winners. The competition, the first of its kind for a hand lotion, opens this month and continues until March 31. During that time anyone buying Blue Velvet is entitled to enter. The competition is



to make up two rhyming lines to complete a four-line slogan verse. Rules and entry forms are available from chemists only. The campaign is being advertised in national newspapers and magazines.

Dispensing Pack Changes. — William R. Warner & Co., Ltd., Power Road, London, W.4, have introduced a 24-oz. tax-free dispensing size Gelusil suspension, as illustrated, for use in dispensing only. The pack replaces the former 6-oz. dispensing bottle. The 6-oz, retail pack of the product continues to be available.



Inhalation Therapy in "Smog." — Bayer Products, Ltd., Neville House, Eden Street, Kingston-on-Thames, point out that their detergent aerosol Alevaire, about which they had many inquiries from chemists during the

recent "smog" conditions, can only be used in conjunction with oxygen or compressed air. With suitable apparatus it produces a mist for inhalation. Details of the product, method, and available apparatus are given in a booklet, "Alevaire Inhalation Therapy," obtainable from the company. Alevaire itself is issued in bottles of 60 and 500 mils.

Bonus Offers

EDWARDS HARLENE, LTD., 58 Gough Street, London, W.C.1. "Smoke" colour rinse. Twelve bottles invoiced as ten. Until March 31.

FASSETT & JOHNSON, LTD., 86 Clerkenwell Road, London, E.C.1. Mistol mist nasal spray. Twenty-four for price of twenty-two. Until March 31.

IMPERIAL CHEMICAL (PHARMACEUTICALS), LTD., Fulshaw Hall, Wilmslow, Cheshire. Lorexane aerosol insect spray. 2½ per cent. additional discount on orders totalling 120 oz.; 5 per cent. extra on orders totalling 240 oz.

F. C. PATON (SOUTHPORT), LTD., Southport, Lancs. Paton's dental ointment. Extra tube outer of one doz. With trial order.

NEW PRODUCTS AND PACKS

Cold Cream Soap.—Cussons, Sons & Co., Ltd., Kersal Vale, Manchester, 7, are marketing a new cold-cream soap, a bland, neutral, super-fatted product containing lanolin cream.

Colour Rinse for Grey Hair.—A new hair colour rinse for grey, greying and white hair is being marketed under the name Smoke by Edwards Harlene. Ltd., 58 Gough Street, London, W.C.1. Smoke is described as a "brush-on, wash-away" tint that imparts to greying hair a glamorous shade without a hint of blue or mauve.

Micro-porous Waterproof Dressing.—Smith & Nephew, Ltd., Welwyn Garden City, Herts, have introduced a new Elastoplast speciality, Airstrip, which though waterproof is claimed to allow free passage of air to the wound. Another advantage of Airstrip is that it is readily stripped off after use "without leaving hard-to-remove plaster marks." Airstrip is issued in containers of two sizes.

Surgical Marking Ink.—Evans Medical Supplies, Ltd., Speke, Liverpool, 19, have made available a plastic marking ink, consisting of an ethyl acetate solution of a cellaquer blue dye mixed with Nobecutane. Nobecutane marking ink is designed to withstand rigorous pre-operative preparation of the skin and to provide lasting delineation. It is issued in a 50-mil screw-capped bottle.

Comprehensive Diet Powder.—Glaxo Laboratories, Ltd., Greenford, Middlesex, announce the introduction of Complan, a comprehensive diet in powder form for persons who cannot eat normally, as well as for others who need a supplement to their diet. Complan supplies economically the full range of proteins, vitamins and minerals needed for nourishment and the maintenance of health. It was first used in clinical trials on over 100 patients who were being fed artificially,

and the results were extremely successful. Unconscious patients fed for periods of up to two months maintained excellent nutrition and mental patients have lived on it almost exclusively for from three to six months. In one hospital patients gained 2-5 lb. weekly until their normal weight was reached. Apart from its use in hospials, Complan has possibilities as a supplement to the daily diet. Its use may be recommended to elderly people living alone, to convalescents, as a children's nightcap, and in all circumstances in which sustaining food is needed urgently. In the home, one cup of Complan per day (two dessert spoons of the powder to a cup of liquid) provides a worth-while proportion of the proteins, minerals and vitamins needed in the daily diet. The simplest method of preparation is to add a small quantity of water to the powder, whisk with a fork to a smooth cream, and stir. Stronger flavours like chocolate powder, tomato purée or proprietary coffees or flavourings may be added before mixing the powder. Sugar or salt may be added to taste.

BUSINESS CHANGES

THE telephone number of Ciba Laboratories, Ltd., has been changed to Horsham 4321.

THE Vernon Porter Organisation (merchandise sales service) has removed to Warren Hill, Loughton, Essex.

THE southern district office of Gillette Industries, Ltd., has removed to Ingersoll House, 7 Kingsway, London, W.C.2 (telephone: Covent Garden 1936) from 47 Victoria Street, S.W.1.

P. H. GALLOWAY, LTD., 154 Walworth Road, London, S.E.17, have appointed Mr. R. C. Vilain to be in charge of their purchasing department. Mr. G. Amor has resigned from his position as works director.

Correspondence

Letters when received must bear the name and address of the sender, not necessarily for publication. The Editor does not hold himself responsible for the views expressed.

Very Fine Value

SIR, — I would like to express my appreciation of the very fine value you are giving to your readers. The Diary, the special issues, the price list when the new purchase tax was imposed, the articles on income tax and shop fitting, and the full reports of pharmaceutical and N.P.U. meetings all combine to give one of today's best bargains. Many thanks for it all.

Greenhithe

STANLEY ACKERS

"Our Other Selves"

SIR,—I was interested to note Xrayser's references to the pharmacists who had achieved fame in other fields, notably in sport. Xrayser added "There must be many more." One that he missed was Stuart Freebairn, who was a member of the most recent All Black's New Zealand Rugby team All Black's Ise. to visit this country.

T. D. WHITTET

London, W.C.1

SIR,—Xrayser's paragraph "Our Other Selves" under "Topical Reflections" (C. & D., January 21, p. 55) prompts me to write of my father, who qualified in the early 1890's and had a pharmacy in Northampton. That he forsook to follow his true love, music, taking the Mus, Bac., and F.R.C.O., degrees. He was always a keen reader of the C. & D. I myself was a dispenser with Frazer & Green, Glasgow, where I met my husband, who is now a representative with Cupal, Ltd., Blackburn.

Leeds, 6 (Mrs.) Elsie Eddleston

Tax and Prices

SIR,—It is refreshing to see in print (C. & D., January 21, p. 65) your quotation that "Comment is free—facts are sacred." It is in the light of that maxim that I take the liberty of commenting on Mr. H. E. Chapman's letter on p. 69 of the current issue under the heading "Open Shop." First of all, what are the facts? It is generally held that the ill-conceived all-round tax increase of 20 per cent, in the autumn Budget acts in a purely inflationary mannerit is intensely irritating and annoying to all sections of the trade. With these latter sentiments in Mr. Chapman's letter of November 5, 1955, I am in complete agreement. I strongly disagree with him, however, in his condonation of the apologies of the multiples regarding the "impractibility to make their price adjustments before Christmas." That is really nonsense! The multiples, with their administrative machinery, are surely better equipped to authorise price adjustments in their branches than the average private establishment. It was possible for me without much difficulty to adjust prices over a period of time as new goods were received. It is interesting to note in this connection that one particular massive multiple (viz., F. W. Woolworth & Co., Ltd.) did not experience

the difficulty—their prices were brought into line counter by counter — all praise to them for their efficiency. Granted that the circumstances were exceptional (at least, it is to be hoped that autumn Budgets will in future leave purchase tax alone!) one is more or less forced to believe that the price stabilisation was utilised as a sprat to catch the Christmas mackerel. Finally, I wonder whether Mr. Chapman's statement that the "P.A.T.A. Council is satisfied that the companies are staunchly behind the Association's resale price maintenance policy and knows and appreciates that they have given very practical evidence of their support of it" is intended to be a "face-saver." I am willing to bet my shirt that when the Budgets of the future (heaven preserve us!) reduce purchase tax, the multiples will, with alacrity, find it "not impracticable" to make their price reductions, particularly if the occasion be near Christmas. London, S.E.15 Frank J. Brean

Medical Representatives

SIR,—Your correspondent Frater Minimus, Ph.C., evidently acquired, during his pharmaceutical studies, a useful, though pedantic, knowledge of Latin. What a pity he did not wait to obtain some experience before he decided to air his views! Most progressioned to a progression of the control of the c sive cthical manufacturers are finding that salesmen, not Latin scholars, have the qualities desirable for propagating their products and some of the leading doctors upon whom men such as he would call could not, and would not, attempt to understand his terminology. (The writer knew one of Harley Street's specialists who had never studied Latin!) A conclusion precisely opposite to that reached by Frater Minimus would appear to be correct. The writer has been propagating ethicals to the medical and pharmaceutical professions for a considerable time. It is his experience that, whilst the uses of the products are appreciated by all medical men, some chemists can only understand molecular weights-and prices.

E. MURRAY, L.CH.

Aberdeen

A Prescription Traced

SIR,-In the London Evening News on January 17, in the ninety-sixth article ("Parson Alington's Revenge") in a series of the "World's Strangest occurred the following para-Stories," graph:

A doctor from Hitchin prescribed some medicine, the taste of which set Alington raging for the brandy bottle.

The paragraph interested me and it may interest others. This pharmacy has prescription books dating back to 1814, and it took only a couple of minutes to find a mixture prescribed for Dr. Alington before Christmas:—

Die Lunae Nov. 30, 1863 Alington the Rev:

Potass, Bicarb, Sp. Amm. Aromat. Syrup Aurant.
Aqua ad 3ss. Zvi M. ft, Sumat 4tem partem ter die cu Pulv. in statii effervescentiae. R. Acid, Citric, Pulv. in pulv iv divid.

In Mr. R. L. Hine's "Hitchin Worthies" another mixture is mentioned:-

"In December 1863, a Hitchin doctor was called in, and prescribed some physic, which Alington refused to swallow until James King, his gardener, had tried it for at least three days first. When another mixture was ordered, more nauseous than the first, Alington smashed the bottle in a fury, called for a half tumbler of neat brandy, tossed it off, fell back on his pillow with a happy sigh and died.'

Looking back in the prescription book, the only other mixture I found for Dr. Alington was on *Die Lunae*, Sept. 21, 1863:—

Although both prescriptions are before December, I feel that they are sufficiently unpleasant to be the ones mentioned.

V. E. LEWIS, B.Pharm., F.P.S. PERKS & LLEWELLYN Hitchin, Herts.

More Prices Pegged

Sir, — In an effort to restrain the rising cost of living, several well-known manufacturers have recently stated that they intend to stabilise their prices for at least six months. We wish to associate ourselves with those companies and state that we will not raise any of our prices in either the Radian or the Radiol groups for a similar period, subject to there being no increase in duties or tax on raw materials or manufactured goods. That is our contribution to the future prosperity of the country and we hope that we will the country, and we hope that we will be joined in this action by many other firms, as we firmly believe that the time has come for a really determined effort to be made to halt the dangerous spiral of ever increasing costs.

RADIOL CHEMICALS, LTD. W. A. S. STEVENS, Managing director London, S.W.15

Neat

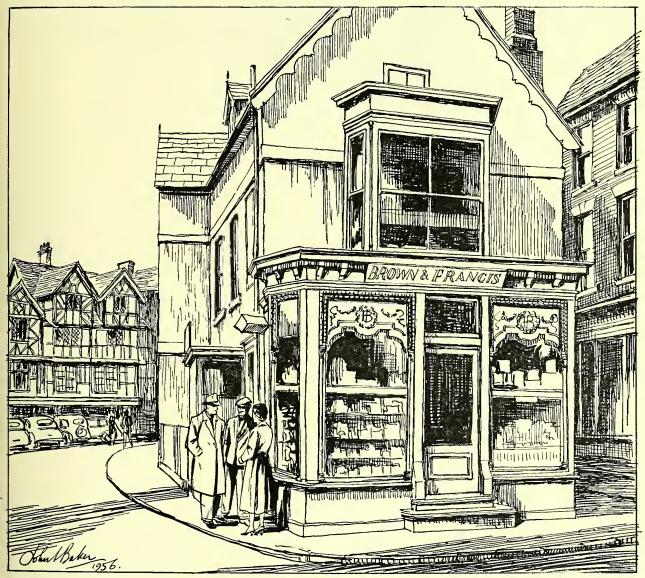
SIR,
May I thank your correspondent,
Poeticus, who kindly flatters
My humble attempts to caricature phar-

maceutical matters, And admit he is justified in his criticism in that, for instance, instead of cram-ming forty-eight syllables in this line and only two in the next, I really ought to make my metre Neater.

Twickenham, J. J. HAYTON Middlesex.

January 28, 1956

PHARMACIES OF BRITAIN—44

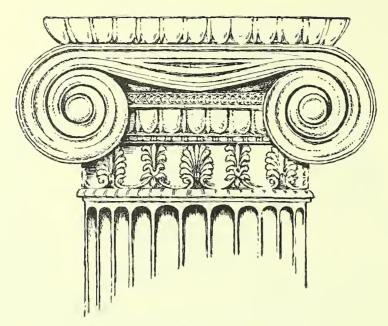


THE PHARMACY AT THE BULL RING, LUDLOW

THE pharmaceutical business of Brown & Francis, 49 Bull Ring, Ludlow, Shropshire, of which today Mr. C. H. Francis, M.P.S., is the sole proprietor, has had a number of changes of ownership. In 1870 Mr. Alfred Marston bought the premises, but he had previously been a tenant, probably from 1850. Marston was an early and fervent believer in advertising! A Ludlow Advertiser of 1878 would contain as many as five large advertisements for products so varied as a cattle food and a pectoral balsam (still made today to the original formula). A later owner always claimed that Marston was the inventor of the salicylic collodion corn paint, though that claim might not go unchallenged! That preparation, too, is still made at the pharmacy, Mr. Marston had a herbarium under glass, as shown in the old print reproduced at right; and at the side of the shop (not visible) a glass aquarium. Between 1896 and 1901 there were two fairly rapid changes of ownership to Mr. Gange and Mr. Truman. In 1901 the pharmacy was acquired by Mr. W. J. Brown, Ph.C., M.P.S., a silver medallist of the Pharmaceutical Society. Mr. Brown, who retired in 1951, became four times mayor of Ludlow and an alderman and freeman of the borough. In the pharmacy he continued to use all the Marston recipes and added to their number. An individualist of the old school of craftsmen, he loathed proprietary medicines. Mr. C. H. Francis, the present proprietor, was apprenticed with Francis & Co., Wrexham. He went next to Bellamys, chemists, Oxford. His father and three of his brothers are pharmacists.



The premises with herbarium, c. 1870.



FIVE YEARS PROVEN EFFECTIVENESS

in general practice

Over five years' usage in general medical practice throughout the world has established Chloromycetin* as today's foremost broad spectrum antibiotic. Chloromycetin is unrivalled for the effectiveness and rapidity with which it is absorbed following oral dosage. This, coupled with its outstanding tissue diffusibility, results in swift, consistent clinical response and provides the flexibility of treatment desirable for varying conditions. Development of resistance by the common pathogens during Chloromycetin therapy is extremely rare and the facility with which it is absorbed accounts for the low incidence of gastro-intestinal upset.

* Trade Mark

Chloromycetin

THE ORIGINAL CHLORAMPHENICOL

CHLOROMYCETIN CAPSULES • SUSPENSION CHLOROMYCETIN PALMITATE

Chloromycetin Ophthalmic • Chloromycetin Ophthalmic Ointment • Chloromycetin Cream 1%

Chloromycetin Ear Drops 10% · Chloromycetin Intramuscular · Chloromycetin Topical 5%

Chlorstreptin Capsules & Suspension



PARKE, DAVIS & COMPANY, LTD. (Inc. U.S.A.) HOUNSLOW, MIDDLESEX Tel: Hounslow 2361



For Retailer, Wholesaler and Manufacturer
ESTABLISHED 1859

Published weekly at 28 Essex Street, Strand, London, W.C.2

TELEPHONE CENTRAL 6565
TELEGRAMS: "CHEMICUS ESTRAND, LONDON"

A Proud Year in Pharmaceutical Exports

UNITED Kingdom exporters of drugs, medicines and medicinal preparations can be justly proud of their achievements in 1955. Despite the stiffest competition they have so far had to meet from other producing countries, they increased the value of their overseas sales by almost 12 per cent. over those of 1954. What makes the result even more gratifying is that the value of similar products imported during that time fell by 20 per cent. from £9.6 millions to £7.7 millions—a trend unfortunately not seen in the country's trade as a whole (see page 85).

In making comparisons between the two years, it must be remembered that the dock strike of October 1954 delayed shipments, with the result that some that ought to have been recorded as arrivals in 1954 were carried forward to the early months of 1955. No accurate means exists of assessing the extent of that disturbance, but it would seem highly improbable that the 1955 increase was materially affected by those delayed shipments, except to a minor extent.

Of the medicinal products for which individual statistics are published in the official Trade and Navigation Accounts, exports of proprietary medicines were at £9.7 millions, against £8.4 millions in 1954. Barbiturates, sulphonamides in tablet form, and penicillin were among the few items that registered decreases. The value of penicillin exported dropped by over $\mathfrak{t}_{\frac{1}{2}}$ million compared with 1954, reflecting not only the greater availability of domestic production in overseas markets but also a turnover to some of the more recently introduced antibiotics. That trend is emphasised in the export figures, which were £1 million up on the previous year. The increased production of the newer antibiotics in Britain, in place of imports from the United States, is demonstrated in the import table. It is due entirely to those reduced imports that the total imports of prepared medicines fell to the extent it did. All other items show an increase.

Now that the trade figures for 1955 are available, the Government will undoubtedly take stock of the position and may be expected, in view of the continued unsatisfactory state of the country's overall trading balance, to issue more directives to exporters during the coming session of Parliament. We hope that the contribution made by the pharmaceutical industry will not go unnoticed by the Board of Trade and the Ministry of Health (the value of the pharmaceutical industry's exports exceeds the cost of drugs supplied by chemists throughout the National Health Service), and that those

Departments will exert a restraining influence on such other Departments as, from time to time, clamour for investigations into costs, breaking of "monopolies," etc., in the drug trade. Restrictions such as might be imposed as an outcome of those inquiries could easily strangle a competitive, progressive and vigorous industry.

Conflicting Evidence on Remuneration

THE minutes of evidence of the Committee of Public Accounts, Session 1955-56, were published recently. When the Third Report of the Committee was issued (see C. & D., December 3, 1955, p. 637), we commented on the fact that the Ministry of Health had anticipated it by enforcing a reduction in the allowance for uncollected levies. It appeared that the Ministry in explaining to the Committee why no reduction had been enforced earlier, had said that the remuneration of chemists as a whole, with that item as a part, was at the time under consideration. We now find that all Sir John Hawton (secretary to the Ministry of Health) told the Committee was that, in addition to the consideration of chemists' remuneration as a whole, "there are also a number of other things, you see, like container allowances and other problems.

Two other statements attributed to Sir John we find it hard to reconcile with one another, namely (1) that the cost of prescriptions is a big field for economy; and (2), that, if the Ministry had the power to order the doctor to prescribe the cheapest preparation, whether it were proprietary or formulary, the economy would not be very big in money. How can it be wondered at, in those circumstances, that the Public Accounts Committee often shows little knowledge of the facts? The oral examinations the Committee carries out are, indeed, exacting, and we can but admire the way in which Ministry permanent officials acquit themselves under them. They are required to carry a tremendous load of information in their heads. But is it not becoming increasingly clear that the task is too much for any officials? Is it not time, as we have already argued (C. & D., December 10, 1955, p. 665) that the Committee should have access to others besides Civil Servants?

The minutes include also a long discussion between the Committee and Mr. H. R. Smith (secretary of the Department of Health for Scotland) on an amount of threepence per National Health Service prescription which is referred to as an "apparent margin" in favour of the contractor. Mr. Smith did not commit himself to describing the "margin" as a "profit," and evaded answering a question by a member of the Committee on the difference between margin and profit. He would go no further than to describe the margin as a "surplus." On what the true meaning of the threepenny margin is we shall have to await further elucidation before understanding, let alone explaining. As the "margin" relates to 1952–53 it may no longer even exist.

The Way to Count the Cost

When the Minister of Health (Mr. R. H. Turton) announced his poliomyelitis vaccination programme to the Press (p. 83) he was pressed to say what the programme would cost. He made it plain that the important point to him was not what the programme would cost in pounds, shillings and pence, but what the

disease cost in terms of human misery, hospital stay, and loss of productive power to the nation.

Those views, coming from a new Minister of Health, are exemplary, and we hope Mr. Turton will apply the same logic to the drug bill. Certainly the two manufacturers who have produced the new vaccine have served the country well. It is understood, for example, that Glaxo Laboratories, Ltd., have spent upwards of £250,000 on research and development on the vaccine.

To parents, another problem of "counting the cost" presents itself, and there are signs that most of them will answer it wisely and, in the light of early American mischances, also courageously.

The results of a Gallup poll on whether parents were willing to allow their children to be vaccinated against poliomyelitis immediately were published in the *News Chronicle* on January 24. They indicated that just over one-third of the parents interviewed were willing to have their children vaccinated at once. Parents must always consider the risks of vaccination and set them

against the potential advantages. The risks have been stressed. Against them has to be set the fact that, in the later tests in the United States, 21 million doses of poliomyelitis vaccine have been distributed with no untoward incident. The new vaccine has the blessing of the Medical Research Council, the Central and Scottish Health Services Councils and the Minister of Health.

The British vaccine does not utilise the virulent type I Mahoney virus that was incriminated in the American failure. The less virulent Brunhilde strain has been adopted by the British makers. In fact Burroughs Wellcome & Co., are understood to be using also a less virulent strain of the type II virus. The hope is held that eventually all British vaccine will be prepared from less virulent strains of all three types of virus. Tests have been laid down by the Medical Research Council that, performed in parallel by the makers and by the National Institute for Medical Research, should ensure both the safety and the antigenicity of the vaccine.

Onward from Galen

A CURRENT CAUSERIE

THE Allenburys amateur dramatic society, which in 1955 put on a play that had to do with the notion of social equality intruding into a citadel of the aristocracy, pre-sented on January 23 and 24 a somewhat similar theme in reverse. The play, The Waters of the Moon, deals with the emotional impact of a wealthy and aristocratic trio, prevented by a blizzard from continuing their journey, upon four resident guests and the proprietor family at a residential hotel on Dartmoor. Family and guests were of varied type and social background but shared a degree of poverty that prevented escape from the company of the others. The parts were played with sympathy, restraint and distinction by a cast of ten under the production, as last year, of Miss Muriel Dommerson. Dr. George Boyes, who introduced her to the audience at the end of the performance, himself showed an extremely firm grasp of stagecraft. The first-night audience again included the chief pharmacist of the Ministry of Health, directors of drug-trade companies and personalities of the profession.

Anyone who thinks that romance in the drug trade is a thing of ancient history should take a look at the phenomenon of rose-hip syrup. Before the 1939-45 war no such product existed. But in those days there were plenty of oranges and lemons. In 1941 they were more than scarce and the Ministry of Health was with some reason concerned lest the health of the nation's children should suffer from lack of vitamin C. Thoughts turned perforce to domestic sources of the vitamin, and somebody, for some reason, thought of rose hips—perhaps because both the Russians and the Germans were known to prepare conserves from the wild fruits. At Kew, Dr. Ronald Melville (a brother of Mr. Colin Melville, F.P.S.) prepared from hips a syrup that contained 200 mgm. of vitamin C in 100 mils. On so promising a demonstration there was called together a committee consisting of representatives of the Ministry of Health, pharmacists, manufacturers, and — imaginative touch!-members of the Women's Institutes. Between them they "organised" three things: a process or processes for extracting the vitamin from the somewhat refractory fruit and making a syrup that would keep; several manufacturers to operate the processes; and not least a nation-wide system of amateur, part-time collectors.

Under the stress of war many enterprises depending on just such a degree of co-operation came into existence. When the end of the war came some of them faded away,

and the return of the oranges and lemons to British fruit shops might have been expected to seal the fate of the rose-hip scheme. Not so. In the 1955 season 800 tons of hips were collected in Scotland and the north of England by members of Women's Institutes, the Women's Voluntary Services, the Girl Guides, the Junior Red Cross and others. During the whole period of rose-hip syrup production the weight of hips collected has amounted to 8,060 tons, and Mr. E. C. Cripps, the president of the National Rose Hip Products Association, has applied a little arithmetic to that figure. On the basis that a railway freight truck hold five tons of hips,

8,060 tons = 1,612 trucks = 32 fifty-truck trains

Mr. Cripps, when he gave that analysis, was presiding at the annual luncheon—the fourteenth—of the Association held recently in London. Today only three of the original manufacturers are engaged in production, but the "relics" and their guests made up a sizeable party to testify to the flourishing state of the industry. It looks as if an appropriately rosy future will match a romantic origin and development.

PHARMACISTS who have grown somewhat bewildered by the multiplicity of trade names offered to them by manufacturers of proprietaries will hardly know whether to cheer or groan at the news, reported on January 20 by the New York correspondent of the Daily Telegraph, that Chas. Pfizer & Co., Brooklyn, U.S.A., have commissioned an "electronic brain" to produce 40,000 words that might prove suitable for new drug names. The words have been printed in a 198-page volume of which, it is understood, only three copies exist. The method employed, it seems, was to feed into the robot "a total of thirty groups of word endings which were found to be common in the medical literature of several languages." The machine produced 22,000 "unsuitable" combinations as well as the names which were approved; and it was found (not surprisingly) that the electronic data processing machine was unable to distinguish "acceptable words from ones that could not be used in polite conversation." Among its successful efforts were "starycide," "platuphyl" and "cliohacyn," which certainly all have a vague medicinal flavour about them, though one might be hard put to say just what their indications might be. Perhaps the next step will be to produce drugs to fit the words.

FROM VICTORIA TO ELIZABETH

Some differences in the practice of pharmacy then and now

By OLD TIMER

REMEMBER the jubilee year of Queen Victoria because, as a future pharmacist, I was intensely interested in the gaily coloured gas balloons that were sent up from our local park. At her diamond jubilee I was able to take a more mature view of life—from a wage earner's standpoint, being at that time passing rich on an apprentice's honorarium of £15 per annum.

I didn't come to London until Edward VII was well on the way out, but my professional roots are set well back in the nineteenth century and I still consider myself, by

training, habit and example, a Victorian chemist.

Since the first presidential congratulatory letter was circulated to all those pharmacists whose names had been enscrolled on the pharmaceutical register for a space of fifty years—those who may well be designated the Quinqua gentry of the profession—I have at different times conned over the early and the late years of my span of service and have tried to pinpoint the differences between the practices of then and now.

No one denies that great changes have taken place but many of those changes have been so gradual that the habits of one decade have merged into those of the next before current thought has appreciated the extent of the modifications. The more spectacular changes, of course, have taken place during the last twenty years.

A Typical Day

As an illustration of some of the conditions in my youth, I will describe a typical day, as spent by my apprentice-master. He was a man of about fifty years, and conducted what would then be known as a good-class family dispensing business in a lock-up shop—with the house above used for storage. He lived about twenty minutes' walking distance away—and did walk it night and morning. He was always in the shop by 8.30 a.m., the senior apprentice having "opened up" about 8.15.

By nine o'clock he would take his place at the front counter and, except for meal times, he would be there until after eight o'clock at night. Between ten and twelve there would be a constant stream of housewives and other customers and, helped by one apprentice, he attended to each one himself, being consulted by many mothers on

all kinds of domestic and household problems.

At 11 a.m. he had a ten minutes' break for a small glass of whisky and soda and a couple of biscuits. About 12.30 the errand boy would return from his home with his hot dinner between two plates. It would be kept warm in a kitchen oven next his office at the back of the shop, and at about 1 o'clock he would leave the counter and spend about three quarters of an hour over his meal. Returning to the front counter he would stand there on duty until 4 o'clock, when he would have another quarter-hour break for a cup of tea, prepared for him by a lady bookkeeper. Resuming duty, he would be at the counter until after 8 o'clock each evening, attending to every customer if he could, advising, prescribing and giving help to all who consulted him. That was his typical day. I never knew him absent from his post except during one rather severe illness. Friday night closing was at 9.30 p.m. and Saturday's was anything between 11 p.m. and midnight.

Changes in hours, of course, have been one of the more noticeable differences between 1890 and 1950, but the proprieter also has very considerably changed his habits. If he is single-handed he must now spend most of his time at the dispensing counter and many capable lady assistants can run the front counter almost independently.

A very striking difference between the conduct of a

pharmacy now and in earlier years is the number of women engaged in the business, both qualified and unqualified. Lady managers are very frequently engaged now and girl assistants, especially if trained, do many jobs in the shop better than a man, whereas, at the beginning of the century, girls were practically unknown as employees in a pharmacy. I might compare the appearance of the shop—inside and outside—nowadays with that of fifty years ago. I cannot help thinking that in the old days we more truly exemplified the requirement embodied in the Council's Statement on Matters of Professional Conduct that "the appearance of the premises should reflect the professional character of pharmacy" than many a modern chemist's shop window does. The selling of cosmetics has now become a fine art, and practically requires the services of a specially trained assistant. That is a long way removed from my old governor's regular adventure into beauty parlour practice, when, at monthly intervals, he shut himself up in his office to produce a batch of his own cold cream in which was incorporated genuine Bulgarian otto of rose bought at considerable cost and stored in an original copper bottle in the safe between intervals of use.

The character of the goods displayed on the shelves behind the front counter in the modern shop is an indication of some of the more subtle changes that have been made in professional practice. The materia medica have gone from the shop rounds and the drug drawers, and while there are fewer galenicals, there are many more medical products. I consider there has been a loss of craft, or manipulative skill because of the striking changes in prescribing habits. I was more familiar with a pill machine than a tablet counter but when I compare my knowledge with that of my junior I have to admit that he knows far more now about penicillin and antibiotics than I did then about pennyroyal and antibilious pills.

Contact with customers does not now follow the same lines as it did formerly. Because of modern advertising and the mass production of packed remedies, and because of their experience under N.H.I. and N.H.S. the public are now far more knowledgeable on health matters, medicines and diseases, and their demands at the front counter can mainly be met by a pre-packed branded preparation, or a dispensed EC10. The unknown quantity in pharmacy—the magic and the lure of the mystical chemist's shop—have all long since passed away, and even the doctor is now frequently told what the patient wants in no uncertain terms. Prescribing habits on the one hand and manufacturing developments on the other have been most potent factors in bringing about changes in the character of the chemist's business.

While the old pharmacist may have satisfying memories of his own—redolent, perhaps, of "cassia, sandal buds and stripes of labdanum and aloe-balls," he cannot make a living out of those nowadays. He is wise if he swims with the current and allows himself to be carried forward on each wave of progress. His juniors know less Latin than he does, and may be hazy on botanical orders, but they can beat him easily on sterilisation methods and pH values. Even blood transfusion is an open book to them.

Knowledge, however, is not everything. Experience is only gained by the passing of the years and that is one advantage still on the side of the older man. Both are necessary, and they are complementary one to another, for the confidence of the young and the experience of the old together will make a blend necessary for the successful progress of all those engaged in the Fellowship of Pharmacy.

PAIN AND ANALGESICS

By S. J. HOPKINS, F.P.S.

THE problem of pain has occupied the minds of physicians and theologians for centuries, but the definitive answer—for them as well as for the unfortunate sufferer—has yet to be found. Relief from pain is one of man's oldest desires, and is still the dominant symptom that drives him to seek the advice and help of the doctor. It is probable that some of the earliest therapeutic experiments were made in the search for pain-relieving drugs, for there is ample evidence that opium, the oldest and most certain remedy for pain, was well known in very early times. The drug is mentioned in the famous Ebers papyrus, and Theophrastus (286 B.C.). described it more exactly under the name meconium. An echo of that old name lingers in the terms meconic acid and meconin, which are inert constituents of the drug.

One Early Anodyne

Apart from opium there were few anodynes until the introduction of cinchona bark from South America in the seventeenth century. Primarily a febrifuge, its value in relieving joint and muscle pain was soon exploited, often in secret remedies sold at fabulous prices. That exploitation by quacks was probably due to the conservatism of the medical profession, which at that time regarded the so-called "Jesuits' bark" with considerable suspicion. However, by 1677 cinchona achieved recognition and respectability by inclusion in the London Pharmacopæia, and thereafter its use increased rapidly. By the latter part of the nineteenth century the demand began to outrun the supply. Coupled with the destructive carelessness of collection methods, it led directly to scarcity and high prices. As an antimalarial, the drug at that time had no rivals, and so, while attempts were being made by the English and the Dutch to start cinchona plantations in India and Java, alternative analgesics were sought elsewhere.

Mandragora, or mandrake, had been used by the ancients as a narcotic, and was a constituent of morion or deathwine, given before torture or execution, but for ordinary pain willow bark and its preparations were in demand. The active principle, salicin, had been isolated by Leroux in 1827. Though now of small importance in itself, it is of considerable interest as being the earliest of the salicylate analgesics. Chemically it is a simple glycoside, and on hydrolysis it yields dextrose and saliginen, or salicyl alcohol, thus:—

$$\begin{array}{c} CH_2OH \xrightarrow{hydrolysis} & CH_2OH \\ O.C_6H_{11}O_5 & OH \end{array}$$

Saligenin, like salicin, is a relatively weak analgesic, but it is of passing interest to note that it has some local anæsthetic effects—a rather unusual property in non-nitrogenous compounds. The compound was used at one time in the United States as an additive to intramuscular injections, but has never attained any popularity as a local anæsthetic in this country.

Both salicin and saligenin are oxidised in the body to salicylic acid, to which their activity is basically due, and

the recognition of that fact led to the use of sodium salicylate derived from natural substances such as oil of wintergreen, which consists almost entirely of methyl salicylate. Kolbe's famous synthesis of sodium salicylate from phenol in 1874:—

extended the use of the salicylates very considerably. For a long time, however, "natural" salicylates were claimed by some to be superior to the synthetic variety. The superiority was said to be due to the presence in the synthetic drug of cresotinic acid (C₆H₃.CH₂.OH.COOH) then regarded as a toxic contaminant, but later work showed that it was no more toxic than salicylic acid itself. The use of the much more expensive natural acid soon lapsed.

Salicylic acid, though it once had an official dose of gr. 20, is too irritant for oral use. Many patients also dislike sodium salicylate. To overcome those disadvantages many esters of salicylic acid were synthesised, but only two have come into general use—one for systemic, the other for external use. It is curious that they should be representatives of the two types of salicylic acid esters. Thus, in methyl salicylate, the carboxyl group carries the substituent, whereas in acetylsalicylic acid the hydroxyl group is substituted, thus:—

Phenyl salicylate is of the same class as methyl salicylate, but though once used extensively as an intestinal antiseptic, it is now of little interest and the B.P.C. gives as its sole use the enteric coating of pills. More recently, salicylamide has received renewed attention. Though synthesised many years ago, it has been used in therapeutics but recently, and in view of the growing realisation of the potentially irritant properties of aspirin, the well absorbed salicylamide may have a useful future.

The salicylates as a pain-relieving group of drugs are of considerable interest. They act by a selective central depression, and have most effect in dull pain of low intensity, such as headache, arthralgia, myalgia, and similar conditions. There is evidence that the mode of action is different from that of many other analgesics, and so far none of the standard methods of testing analgesics has demonstrated with salicylates any raised pain threshold. That is an unusual situation, but it has the advantage of offering scope for additive effects when salicylates are prescribed with other analgesics, and perhaps explains the great popularity of tab. codein. co.

Other salicylate compounds have been introduced from time to time, including acetylbromo- and acetyliodo-salicylic acid, acetyl-p-amidosalol, and magnesium and calcium acetosalicylates. Of those, only calcium acetosalicylate

January 28, 1956

is of any importance as, being soluble in water, it affords a means of giving aspirin in solution when neither tablets nor suspension would be tolerated. It may be prepared in a stable form by adding sodium bicarbonate to aspirin suspended in a solution of calcium chloride. The precipitated calcium salt is filtered off, washed with calcium chloride solution, and dried. The final product is a stable, soluble powder containing about 5 per cent. of calcium chloride. The term "stabilised" applies only to the powder; once in solution, it undergoes hydrolysis and gradually changes to calcium salicylate and acetic acid.

Sodium Gentisate

Sodium gentisate, though rarely used as an analgesic per se, is of interest for the enthusiasm with which it was introduced in 1948 as a less toxic alternative to the salicylates in the high dose treatment of rheumatic fever. Chemically, it is the sodium salt of 2:5-dihydroxybenzoic acid:—

2:5-dihydroxybenzoic acid

and is often acceptable to patients who can no longer tolerate salicylates.

An associated compound is sodium resorcylate, the salt of 2:6-dihydroxybenzoic acid, introduced in 1951. Preliminary clinical trials indicated that the arthritic manifestations of rheumatic fever are soon relieved by 1-gm. doses of the drug, but as some undesirable side-effects have been experienced the compound may never become a serious rival to the long-established salicylates.

Phenacetin

Phenacetin owes its introduction into therapeutics to the toxic effects experienced with acetanilide. The latter eompound, also known as antifebrin, was introduced as an antipyretic and analgesic in 1866, but even in small doses it caused occasional idiosyncrasy leading to cyanosis, and if the drug was taken over any length of time chronic poisoning frequently occurred. A search was soon made for less toxic alternatives, and in the belief that acetanilide was oxidised in the body to p-aminophenol, derivatives of that compound were tried. The most satisfactory product was the acetyl derivative of the ethyl ether of p-aminophenol, better known as phenacetin, and that drug still occupies an unchallenged place in the field of analgesics after more than half a century of use. The relationship between the various compounds can be shown thus:—

Phenacetin is one of the safest analgesic drugs, and sidereactions with it are uncommon. Its analgesic effects are qualitatively similar to those of the salicylates, and the drug is employed extensively in proprietary headache tablets, "pain-killers," and similar products. The effects of phenacetin are said to be enhanced by magnesium oxide, which may explain the addition of the oxide to some proprietary analgesic preparations.

Phenazone

The compound phenazone was introduced in 1884. Being soluble in water, and rapidly absorbed, it is preferred by some when a particularly quick action is required. Chemically it is a pyrazolone derivative with the structure shown at the head of the next column:—

Phenazone is not free from side-effects, but skin rashes and cyanosis are not so common as with acetanilide. The oral dose is gr. 5-10. In the pain of sciatica a 25 per cent. solution in alcohol has been injected along the sciatic nerve. Great care has to be taken that the alcohol does not reach the nerve itself. The action of phenazone is basically similar to that of the salicylates, and an addition compound, phenazone salicylate, was described in the B.P.C., 1949, dose; gr. 5-20.

Amidopyrine

The drug amidopyrine is closely related to phenazone, being 4-dimethylamino-1-phenyl-2:3-dimethyl-5-pyrazolone:

Amidopyrine is a powerful analgesic with a slow and prolonged action, and at one time was prescribed fairly extensively. Unfortunately, the drug can cause severe and sometimes fatal agranulocytosis, and has therefore fallen sharply from favour. Agranulocytosis is characterised by a marked reduction in the number of leucocytes in the blood, coincoding with fever, severe ulceration of the mouth, weakness and exhaustion. The risks associated with amidopyrine therapy are real, but they are not inevitable and have perhaps tended to overshadow the occasions when the drug may be of value. Thus in the terminal stages of disease associated with severe pain, as in some forms of cancer, it is common to prescribe a mixture of aspirin with increasing doses of tincture of opium for day therapy, with more potent drugs at night. The inclusion of amidopyrine increases and prolongs the analgesic effects of the aspirin and opium mixture and, provided a watch is kept for any signs of intolerance, the use of the drug may well be justified by the results.

Phenylbutazone

On the Continent amidopyrine, in spite of its risks, has been a fairly popular analgesic, particularly in the treatment of rheumatic conditions. Attempts were made by one firm to produce a soluble form of amidopyrine for injection, and eventually a solution containing amidopyrine and the sodium salt of 3:5 dioxo-1:2-diphenyl-4-n-butyl-pyrazolidine was marketed under the name Irgapyrin. The results obtained with the product were so encouraging that the hypothesis arose that the effects were not due to the amidopyrine alone, but partly to the solvent. The hypothesis was soon put to the test, and proved to be well founded, and under the name Butazolidin the drug has now an

established place in therapeutics. It is given in doses of 100–200 mgm., and the aim of treatment should be a minimal dose compatible with adequate relief. Butazolidin is not free from risk, as skin rashes, vomiting, agranulocytosis and thrombocytopenia have all been reported. Periodic blood examinations are necessary, and the drug should not be given to patients with hypertension or renal or hepatic disease. Within its limitations, however, the drug is of great value, and further research may lead to the synthesis of less toxic derivatives.

Quinoline Derivatives

In the analgesic field the quinoline derivatives in use are few in number and owe their use to the realisation that quinoline occurs in the quinine structure. The most important is cinchophen, or 2-phenyl-quinoline-4-carboxylic acid:—

Cinchophen has analgesic properties resembling those of the salicylates, but those properties have been overshadowed by the remarkable ability of the drug to increase the elimination of uric acid. Hence its main use is in the treatment of gout, a use indicated by the original proprietary name of Atophan. Gout is, of course, characterised by "tophi," the chalky deposits of urates around the joints. Until about 1925 the drug was prescribed fairly freely, without marked toxic effects being encountered. Being an acid it was a gastric irritant, and had been known to cause peptic ulcer, but when prescribed with large quantities of sodium bicarbonate (10-15 gm. daily), those reactions were seldom experienced. The bicarbonate also had the advantage of retaining the eliminated urates in solution in the urine. Since 1925, however, many cases of severe reactions to cinchophen have been reported. The reactions have been due to liver damage, and such hepatoxic effects, though rare, are so severe as to limit the use of the drug very considerably. They are quite unpredictable, and may occur after the course of treatment. A successful first course is no guarantce that subsequent treatment with cinchophen, even in identical doses, may not precipitate an attack.

Neo-cinchophen, the ethyl-6-methyl derivative of the drug, was subsequently introduced in the hope of eliminating those reactions. It is much less irritating than cinchophen to the gastric mucosa, but as reactions and fatalities have followed its use it needs to be used with the same strict caution as the parent drug.

Morphine and Morphine Substitutes

Before 1939 the physician faced with a need for an analgesic more effective than any of those of the salicylatephenacetin group had no choice but to fall back on morphine and its associated drugs. Between those two groups there is a wide margin of activity, and the want of a therapeutic bridge between them had been long and keenly felt. In that year Eisleb and Schauman synthesised a new compound, having some relationships with atropine, and investigated it from the spasmolytic point of view. During toxicity tests they noted that the new compound, now known as pethidine, caused tail erection in mice. That toxic effect is also produced by morphine, and the drug was further tested for analgesic power, which was found to be present to a surprising degree. Pethidine was rapidly developed as the long-sought morphine substitute. It was soon in wide use. After the original enthusiasm had subsided to a more practical level, a more critical appraisal of its true value was possible. Somewhat higher doses are necessary than those suggested in the early work, and it was found that pethidine, if by no means a complete morphine substitute, was undoubtedly a powerful analgesic, particularly in pain due to spasm. Though much less likely

to be misused than is morphine, its use involves a risk of addiction that must always be borne in mind. Pethidine, known as meperidine in America, is ethyl-1-methyl-4-phenylpiperidine-4-carboxylate hydrochloride. Its formula is given alongside:—

It may be synthesised from di(2-chloroethyl) methylamine and benzyl cyanide. The nitrile thus obtained is treated with alcoholic hydrochloric acid to give the base.

Pethidine has structural and pharmacological relationships with both atropine and morphine, and from a study

of the three compounds many attempts have been made to discover the essential analgesic fragments of the molecule, and to synthesise still more active drugs. The phenyl and carboxyl groups at the 4-position are essential for analgesia, but certain ketone derivatives exhibit increased activity. Thus ketobemidone, with the following structure:—

is thirty times as active as pethidine, but its habit-forming dangers preclude its therapeutic use. Alphaprodine or nisentil:—

is also a powerful drug, but its superiority to pethidine has yet to be proved. Therapeutically, pethidine is of chief value in pain due to spasm, and doses of 100 mgm. may give relief for two-to-four hours or occasionally even longer. In obstetrics it is of exceptional value, as it accelerates rather than retards labour.

Methadone

Also known as amidone and Physeptone, the compound methadone was the result of German research during the 1939-45 war. Chemically it is dl-4:4-diphenyl-6-methylamino-3-heptanone:—

It is a powerful drug, comparable only with morphine. The average dose is 5-10 mgm., and the effective duration of effect is three to four hours. Respiratory depression caused

is less, and analgesia is achieved with less sedation than from equivalent doses of morphine. Methadone therefore finds its widest field of usefulness post-operatively, for the patient is left by it relatively alert yet free from pain. Conversely, morphine is preferred for pre-operative use, because adequate sedation is then essential.

Isoamidone

Isoamidone, or 6-dimethylamino-4:4-diphenyl-5-methylhexan-3-one, has similar properties to methadone and morphine, but has fewer side-effects. Respiratory depression resulting from its use is less than that from that of morphine, and it is said to be free from the occasional sideeffects of methadone, such as dizziness and nausea.

Phenadoxone

Many variations have been made on the methadone structure in the search for superior derivatives. Few have so far shown any outstanding advantages, or achieved commercial success, but phenadoxone is an exception. In this compound the dimethyl-amino group of methadone is replaced by the morpholino group, giving the following structure:—

Phenadoxone is given in doses of 10-30 mgm. orally or by injection (it is not suitable for intravenous use). The drug offers a wider margin of safety than some other morphine substitutes, and the dose can be adjusted to individual needs. In the body the drug is broken down fairly rapidly and cumulative effects are rare, but that can be a disadvantage in severe and continuous pain. In such circumstances a long-acting drug is essential.

Methorphinan

Known in this country under the trade name Dromoran, methorphinan is a recent addition to the range of synthetic analgesics related to morphine. It may be described as 3-hydroxy-N-methyl morphinan, with the following structure:—

Methorphinan

Early work on this compound was done with the racemic substance. Subsequently it was shown that the laevo-isomer was the active moiety, the dextro-isomer having no significant analgesic action. It is this laevo-compound that is marketed in Britain. Methorphinan has a more powerful effect than morphine, but much more important is its extended duration of action, which may last for as long as ten hours. That exceptional activity is allied with a freedom from side-effects, which combine to make methorphinan a drug of unusual value.

Diphenylethylamine

The success which has attended the endeavours to find potent analgesics with a structure ultimately derived from that of morphine has tended to overshadow the possibilities that analgesic properties of a similar order may yet be found in quite different substances.

Stilbæstrol has a structure that has some links with the steroid æstrogens, which it simulates in action. That chemi-

cal relationship to the phenanthrene-derived hormones is more apparent than real, but the marked estrogenic activity of stilbestrol suggested to Dodds and his associates that simple compounds might be found with the properties of other phenanthrene derivatives, such as morphine.

With that end in view, they had a series of diphenylethylamine compounds prepared and tried out clinically for alleviating the pain of cancer.

The compounds denoted M3, M4 and M7, given in doses of 50-400 mgm., gave considerable relief from pain, but subsequent experience showed that the substances had severe limitations. They were found to be only of value in the relief of pain due to pressure on nerves, and to have no general analgesic action. Their specialised effect was later confirmed by laboratory work on the evaluation of analgesics, and further investigation along those lines was abandoned.

The diversity of structure encountered in analgesics indicates that there is still a wide field for investigation. Of greater immediate interest is the possibility of finding drugs that can increase and extend the action of established analgesics.

Chlorpromazine

Pain is a highly subjective phenomenon, and though its perception does not vary widely between different but normal individuals, the response evoked by pain is far from being uniform. That final response to painful stimuli, and a patient's attitude towards his disease, is the resultant of many factors, such as age, environment, temperament and the highly individual psychosomatic balance.

Most analgesics, by virtue of their action on the central nervous system, blunt the degree of pain perception, but chlorpromazine, introduced under the name Largactil, offers a new approach to the problem of intractable pain.

Chlorpromazine

The drug, which is a phenothiazine derivative, does not abolish the perception of pain, but has the unique effect of producing an indifference to it. The patient remains aware of the pain, but can regard it with some detachment. It is with him, but not of him, and by the use of this still new and unusual drug he may be enabled to float as it were on a sea of pain, which is ever present, but by which he need no longer have the fear of becoming overwhelmed.

In pain due to malignant disease, chlorpromazine can extend and increase the action of analgesic drugs, and at the same time can reduce some of the less-pleasant side effects such as nausea and depression. In the terminal stages, when adequate analgesia may be progressively difficult to achieve, chlorpromazine may prove an invaluable adjuvant.

Conclusion

The scope of this paper does not permit a full discussion of some less important or restricted-range analgesics, such as papaverine, Dilaudid and Femergin, nor a survey of the methods employed to evaluate analgesics. The latter problem is particularly difficult. Many tests, using animals, are devised to measure a threshold intensity of a painful stimulus before and after the administration of an analgesic. Such tests are useful for eliminating the less active compounds, but translation of the results obtained with a healthy animal to a dosage scheme suitable for a very ill patient is altogether a different matter. Many ingenious schemes have been devised using human subjects, such as the heat test of Hardy and others, the pressure on the nail bed test of Eddy, but perhaps the muscle pain test of Hewer and Keele affords a greater variation in response. In that test, a cuff is applied to the upper arm to cut off the circulation. The hand and arm muscles are then exercised by regular compression of a rubber bulb. Intolerable pain is soon produced, and the injection of an effective analgesic produces rapid but temporary

In spite of the guidance given by such tests, the final appraisal is in the hands of the clinician, for it is only by use on patients who really need analgesia that analgesics can be finally assessed. The field is still wide, but it may well be that a combination of drugs with a potentiating

effect on one another will be clinician's final choice, rather than any single analgesic, however potent.

The possibilities of potentiation have been hinted at by Cook (1954) who has shown that β -diethylaminoethyl-diphenylpropyl acetate (SKF 525A), with the following structure:—

SKF 525A

enhances the action of morphine, codeine, pethidine, amidone and methorphinan. The compound has but little analgesic action of its own, so the effect cannot be an additive one. The result is puzzling and difficult to explain, but it may perhaps be the beginning of a new approach to the whole problem of analgesia.

BIRL LOGRAPHY

Eisleb, O., Schaumann, O., Disch, med, Wschr., 1939, **65**, 967. Dodds, E. C., et al., Nature, Lond., 1943, **151**, 614; 1944, **154**, 514. Hardy, J. D., et al., J. clin. Invest., **19**, 659, **20**, 63. Eddy, N. B., J. Pharmacol., 1928, **33**, 43; 1932, **45**, 339. Hewer, A. J. H., et al., Lancet, 1948, **2**, 683; 1949, **1**, 431. Cook, L., et al., J. Pharmacol., 1954, **112**, 473.

HOSPITAL PHARMACY FORUM

THE POISONS CUPBOARD

PUBLICATION recently of the text of the Memorandum of the Pharmaceutical Society and the Guild of Public Pharmacists on the care and custody of medicines in hospitals has again focused attention on the unsatisfactory state of the Poisons Rules in that respect.

In spite of the welcome tendency for hospital management committees and boards of governors to allocate increasing responsibility in this matter to the pharmacist, it remains possible for hospitals to be operated entirely without a pharmacist. In those circumstances the handling of medicinal substances becomes the responsibility of some ill-defined "person appointed" for the purpose.

If the recommendations of the report are accepted and implemented, either by changes in the Poisons Rules or by a direction from the Ministry of Health, every hospital would be required to use the services of a pharmacist to supervise that aspect of the administration. Since the pharmacist is the only person trained in the specialist knowledge of poisons law, the reform is long overdue.

The most important principle enunciated in the report is one that must gladden every hospital pharmacist: namely (a) the emphasis that every medicinal substance is a potential poison and (b) that, in the context of the hospital, division into schedules tends to be a little academic. A notion that there exists a hard differentiation between poison and non-poison is a dangerous one to encourage in the minds of nurses. The recommendation that all medicinal substances should be kept in a closet or cupboard reserved for that purpose is therefore a wise one. Too often cleaning materials and other odds and ends are found housed in cupboards that should, by their very nature, proclaim the importance of their contents.

Within such a closet some division into categories is obviously necessary, and we agree with the report in its recommendation that the main division should be into preparations that may be taken and preparations for external use only. That is a difference which is not recognised in the Poisons Rules, where division is based entirely on the chemical nature of the materials—a division which, though logical enough, means little to persons not trained in chemistry. Segregation according to purpose is more likely to be meaningful to a nurse.

Within the divisions here outlined it would obviously be desirable to add special warnings in specific cases, and the Poisons Rules are as good an indication of suitable labelling as any.

The Dangerous Drugs form a class apart, since the purpose of the D.D.A. is different from that of the Pharmacy and Poisons Act. It is clearly essential that narcotics should be kept in a separate locked receptacle, and that the key should be kept by the sister in charge of the Only by direct knowledge of each occasion on which the key is used can she fulfil her responsibilities as a person authorised to be in possession of Dangerous Drugs. Most hospitals do have separate cupboards for D.D.A. substances, but they are not obligatory. The substances affected are required only to be kept in a cupboard "solely reserved for poisons," and it would be permissible for them to be kept in the same cupboard as, say, barbiturates or lysol, provided that no "non-poisons were included. Clearly that anomaly needs to be corrected, and rules need to be drawn up to ensure the segregation of Dangerous Drugs.

Inevitably, in making general rules, isolated peculiarities must be ignored. Consequently there must arise many instances where the recommendation will cause difficulty. A careful study of the conditions in each hospital group should be made by the pharmacist to see how the proposed alterations affect local arrangements. In that way effective control may be established in the hands of persons properly qualified to safeguard the public against error or default.

A PHARMACIST'S ANTHOLOGY PAST GALEN'S POWER

From Doctor ———, by Robert Browning And forth he went. Folk heard him ask demure 'How do you style this ailment? (There he peeps, My father, through the arras!) Sirs, the cure 'Is plain as A.B.C.! Experience steeps Blossoms of pennyroyal half an hour In sherris. Sumat!—Lo, how sound he sleeps—'The subject you presumed was past the power Of Galen to relieve.



Muffler Time is 'Kepler' time! Mothers realise how valuable 'Kepler' is during the winter in providing extra nourishment, promoting sturdy growth and building up defence against infection. On

their guard against the severity and possible epidemics of the coming months, they will be asking you for 'Kepler'—not only for the children, but for the adults in the family too! If your stock of 'Kepler' is not large enough to deal with this winter's demand, order now.

'KEPLER'

COD LIVER OIL WITH MALT EXTRACT

to deal with this winter's demand, order now. Protects the bodies it builds



BURROUGHS WELLCOME & CO. (THE WELLCOME FOUNDATION LTD.) LONDON



Case histories in ever-growing numbers are

repeatedly telling the success story of Achromycin tetracycline. Clinical results are demonstrating to specialist and practitioner alike that here is a truly remarkable antibiotic—unsurpassed in its antibacterial range and singularly free from toxicity. Indeed, in the eyes of more and more doctors, Achromycin is today acknowledged as the rational first choice among antibiotics... the surest means of striking decisively against invading infection.

For greater comfort., potency., economy

ACHROMYCIN'

ACHROMYCIN Tetracycline is available in the following forms:

CAPSULES · TABLETS · SOLUBLE TABLETS · EAR SOLUTION · INTRAMUSCULAR · INTRAVENOUS OINTMENT 3% · OPHTHALMIC OINTMENT 1% OPHTHALMIC STERILIZED ORAL SUSPENSION PEDIATRIC DROPS SPERSOIDS* Dispersible Powder SYRUP TROCHES



* Registered Trade Mark



LEDERLE LABORATORIES DIVISION

Ganamid Products and BUSH HOUSE, LONDON, W.C. 2, TEMPLE BAR 5411

PHARMACEUTICAL SOCIETY OF NORTHERN IRELAND

Monthly meeting of Council

AT a meeting of the Council of the Pharmaceutical Society of Northern Ireland, held in Belfast, on June 20, THE PRESIDENT (Mr. S. E. Campbell) welcomed to the Council Dr. R. G. R. Bacon (senior lecturer in organic chemistry, Queen's University, Belfast), who has succeeded the late Professor J. Small; and Mr. C. E. Moss, who was co-opted to replace Mr. H. P. Crossin, who resigned in November 1955.

Mr. Campbell referred to the death of Mr. John McGregor's father, and the secretary (Mr. W. Gorman) was instructed to convey the Council's sympathy to the relatives. Mr. Gorman tabled a letter from Mr. Moss thanking the

Council for his appointment.

MR. GORMAN reported that he had received a letter from the Ministry of Home Affairs pointing out that provision had been made in the Pharmacy and Poisons Act (Northern Ireland), 1955, for the establishment of a Poisons Board to exercise the functions previously carried out by the Council and the Medical Faculty, Queen's University, and requesting the Council to nominate three members to the Board. It was agreed to nominate Messrs. G. E. McIlhagger, C. A. Quinn and W. H. Boyd.

Report of Board of Examiners

THE SECRETARY presented the report of the board of examiners on the Society's December 1955 examinations which showed that fifty-seven candidates entered for the Final Part I Qualifying examination of whom four were absent, twenty-four passed, seventeen failed, four were referred in biology, three in chemistry and five in physics. Of nine candidates who had entered for the third time, four had failed the examination. In the Final Part II Qualifying examination there were sixty-nine candidates, of whom twenty-four passed, twenty-nine failed, five were referred in pharmaceutics, three in pharmacognosy and four in forensic pharmacy, and four were absent.

On the motion of Mr. H. W. GAMBLE, seconded by Mr. P. R. W. SHINNER, the following board of examiners was appointed for 1956:—Botany, Dr. A. F. G. Fenton; Zoology, Mrs. G. M. D. Gotto; Physics, Dr. C. S. Watt; Chemistry, Mr. H. H. Campbell; Pharmaceutics and Forensic Pharmacy, Mr. F. R. C. Bateson; Pharmacognosy, Mr.

G. Rattray; Physiology, Dr. R. F. Whelan.

The report of the Finance Committee, adopted on the motion of Mr. McIlhager, seconded by Mr. H. F. Moore, recommended that a sum of £664 at present in the ordinary investment department of the Belfast Savings Bank should be transferred to the Ulster Bank account. It was agreed to place the seal of the Society on the certificates of qualification of students who had passed the December Final Part II Qualifying examination and also on the transfer of £1,500 worth of $4\frac{1}{2}$ per cent. British Electricity Stock.

Theophilus Harper Foundation

MR. McIlhagger said that at the Council's previous meeting it had been agreed to set aside a sum of £100 annually for grants to outstanding students wishing to take post-graduate courses. He proposed that the grant should be known as the *Theophilus Harper Foundation*. In doing that they would be paying tribute to a man who, in his lifetime, had done much to further the aims and objects of his profession. Mr. W. P. EWART thought that the suggestion was a good one and should receive the full support of the Council. Mr. C. E. Moss concurred and twas agreed to accept the suggestion.

MR. MCILHAGGER said that when the Education Comnittee was drafting the new regulations in connection with the provisions of the 1955 Act attention might be given to the award of Fellowships of the Society to post-graduates deserving such recognition. MR. C. A. QUINN (vice-president) said that that was a point which could be borne in mind by the Committee before the matter was presented to the Council.

Potentially a Precedent

The St. John Ambulance Association, Northern Ireland, wrote asking the Council to circularise members of the Society with a view to establishing a permanent subscription list from the members. After discussion, it was agreed that if that were done a precedent would be created and that requests would be received from many other such bodies. The Council agreed that in the circumstances it would not be advisable to issue such a circular.

BRITISH FINE CHEMICALS AND THEIR USES

52. BORIC ACID

B ORIC acid is supplied as the commercial and B.P. crystals and powder, the crystal being available in various sizes. Though obtained to a small extent naturally, the bulk of the material is produced artificially from Stassfurt salts, crude borax and brines containing borax.

crude borax, and brines containing borax.

One of a wide variety of production and refining methods adopted is to acidify the borax material with sulphuric or hydrochloric acid and boil, the boric acid ultimately crystallising out. Brine solutions and Stassfurt salts are subjected to another crystallisation process. A process of treating borax materials with sodium nitrate results in the simultaneous formation of boric and nitric acid.

Few fine chemicals enjoy such a wide range of industrial uses as boric acid and it is difficult to ascertain which use accounts for the greatest consumption. Its medicinal pro-

perties are well known to pharmacists.

In the chemical industry boric acid is used for making borates by both wet and fusion methods. Borates and borated pigments are included in various paint, enamel, lacquer, and finish compositions. As a glazing material boric acid plays different rôles. It is a constituent of glass compositions, art enamels, enamelled coatings for iron and steel, glass pastes, cement materials which take a good polish, pottery, glazes for paper in paper manufacture, and starch glazes used in the laundry. In leather tanning it is used in the initial preparation of hides as well as in leather dressing compositions and artificial leather products. In modern synthetic rubber compositions, boric acid is used in poly-chloroprene gels and as a thickener, and it is included in many dental preparations, toilet powders and wine-making.

Boric acid has long been included in fireproofing compositions, for textiles as a solvent for mordants, and in certain synthetic-fibre processes. The same fireproofing properties are taken advantage of for impregnating wood; lining preparations for coating safes; for some metal-surfacing treatments and for impregnating candle wicks. It is employed as a fluxing material in making artificial precious stones, in waterglass manufacture, for converting soft wood into a form of hardwood, in the making of intermediates, and in the preparation of fine-grain developers. In metallurgy, it is used for large-scale gold and silver refining, in tinning processes, in electro-refining of metals, in electro-plating, as flux in copper brazing and welding, in the production of boro-salts of the rarer metals, and in mineralogy for blow-pipe analysis

and in mineralogy for blow-pipe analysis.

It is also used for the production of boron alloys of copper, iron, and manganese, boron nitride, special boron products for cutting tool tips, and more recently in connection with nuclear activities. The commercial salt is liable to contain different impurities depending on its initial source of raw material, but usually they comprise borax, sodium,

magnesium, sulphates, and chlorides.

TRADE REPORT

The prices given are those obtained by importers or manufacturers for bulk quantities or original packages. Various charges have to be added whereby values are in many instances augmented before wholesale dealers receive the goods into stock. Crude drugs and essential oils vary greatly in quality and higher prices are charged for selected qualities.

LONDON, JANUARY 25: The CRUDE DRUGS market remained firm during the week despite the poor volume of business transacted. Under that head Honey provided the only outstanding feature, the prices of all varieties being sharply advanced because of the present shortage which may be made even more acute in the weeks ahead by the current dock strike in Australia.

The Australian honey crop is said to have been very poor and with Germany a large buyer, higher rather than lower prices can be expected in the near future. The other outstanding feature of the week was provided by OLIVE OIL. For a few days Spain stopped its export and then announced that it would issue licences for up to 1,000 tons a month—about one-quarter of the normal quantity—and of that 1,000 tons it is understood that 60 per cent. must be earmarked for the dollar areas. The remainder will be sold not at a fixed remainder will be sold not at a fixed price but to the highest bidder. Shippers in France are obviously awaiting developments since they are not sellers at the moment, whilst Greece banned the export of the oil some time ago. In Waxes, Bees' was up by an average of 10s, a cwt. while CARNAUBA for shipment was lower by 7s. 6d. In Spices, Cinnamon for shipment was dearer but Pepper after an advance declined to lower levels. PAPAIN was firmer by sixpence per lb.

ORANGE and LEMON OILS are tending firmer at origin. Elsewhere among ESSENTIAL OILS holders of NUTMEG are reserved in their quotations because

of replacement difficulty.

A leading British manufacturer of silicones has announced substantial reductions in the home trade prices of some of their silicone fluids and emulsions. The reductions vary from 2s. to 4s per lb.

Pharmaceutical Chemicals

ADRENALINE.—Rates for synthetic B.P. are from 1s. 3d. (500 gm. lots) to 1s. 9d. (10 gm.) per gm. and ACID TARTRATE, B.P., from 10d. to 1s. 2d.

from 10d, to 1s. 2d.

BORAX.—Prices for B.P. grade, for quantities of 1 ton and upwards, are as follows:—Granular, £50; crystals, £52 10s.; powder, £53 10s.; extra fine powder, £54 10s. per ton. Prices of commercial range from £40 to £45 10s. per ton, as to type and packing. Dehydrated borax is £61 10s. per ton in paper-lined hessian bags or £60 10s. in paper bags; carriage paid in Great Britain. Usual surcharges for smaller quantities.

for smaller quantities.

BORIC ACID.—Prices for B.P. grade in quantities of 1 ton and upwards are as follows:—Granular, £83; crystal, £90; powder £87 10s.; extra-fine powder, £89 10s. per ton, in 1-cwt. lined hessian bags carriage paid in Great Britain. Surcharges for smaller quantities: Less than 1 ton but not less than 5 cwt., 1s. per cwt., 3 cwt., 2s.; 1 cwt., 3s.

CHINIOFON.—B.P. 1948 is 67s. per kilo; 50-kilo lots, 62s. 6d. per kilo. The sodium derivative (B.P. 1953) is 99s. 4d. and 92s. 9d. for the same quantities.

CITRATES.—Rates (per lb.) are as fol-

CITRATES.—Rates (per lb.) are as follows:—Potassium, 1-cwt. lots, 3s. 10\fmathbd{1}d.; 28-lb., 4s. 10d.; Sodium, 1-cwt., 3s. 3\fmathbd{1}d.; 28-lb., 4s. 1\fmathbd{1}d. (powder of both salts twopence more). Iron and Ammonium, 1-cwt. lots, granulated, 4s. 2\fmathbd{1}d.; 28-lb., 5s. 3d. Scales are 4d. per lb. above the granulated.

CREAM OF TARTAR.—Rates for the home trade are now as follows:—1 ton lots, 231s. per cwt.; 10-cwt., 232s.; 5-9-cwt., 233s.; 2-4-cwt., 234s.; 1-cwt., 235s.

DEXTROSE. — Rates are as follows:—MONOHYDRATE, 8.6., 1-lb., 1s. 11½d.; 7-lb., 1s. 10d.; 28-lb., 43s.; free packages, less 12½ per cent. to wholesalers, 1n bulk, 1-ton lots, £90 ex works, ANHYDROUS, B.P., 7-lb., 14s.; 14-lb., 26s. 3d.; 28-lb., 49s. (terms as for monohydrate). 1-ton lots, £107 10c. as workshops. £107 10s. ex warehouse.

EMETINE.—Price for 32-oz. lots of the HYDROCHLORIDE is 250s per oz. The BISMUTH IODIDE is 125s. per oz.

ERGOMETRINE. — For 20-gm. lots the price of the MALEATE, B.P., is £21 10s. per gm.. and the TARTRATE, £20 per gm.

ETHER.—Prices (per lb.) in winchesters are as follows:—TECHNICAL, B.S.S., and SOLVENT, 5-cwt., 2s. 5d.; 10-cwt., 2s. 4d. ANESTHETIC, B.P., 5-cwt., 3s. 10d.; 10-cwt., 3s. 9d. In drums prices are 4d. per lb less than above.

GALLIC ACID.—B.P.C. is 8s. 7d. per 1b. for 1-cwt. lots.

HYDROGEN PEROXIDE.—Carboy lots of 20 vols. are 5s. per gall. The 35 per cent. (by weight) is 158s. per cwt. in 1-cwt. carboys.

HYPOPHOSPHITES. — Prices per lb. are as follows:-

SALT		7 lb.		28 lb.	I cwt.
CALCIUM		3.	d.	s, d.	s. d.
			7	1	3 0
Iron		13	3	12 9	12 3
MAONESIUM		10	4	9 11	9 6
MANGANESE		13	6	13 0	12 6
POTASSIUM		8	7	8 2	7 9
SODIUM		7	1	6 8	6 3

ICHTHAMMOL. — B.P. is from 2s. to 2s 6d. per lb. in 1-cwt. lots as to origin and container.

IODOFORM.—Powder is 26s. 1d. per lb. in 1-cwt. lots and crystals, 28s. 9d.

ISONIAZID.—In 5-kilo lots the price is about 140s. per kilo.

MAGNESIUM SULPHATE.—Quotations for £17 10s, and £20 per ton according to size of crystal and manufacture. Exsicated is £37 2s, 6d, per ton. All ex works.

Mandelic acid.—In 1-cwt, lots the price is 12s, per lb, with the Calcium salt also 12s. Sodium mandelate is 12s. 6d. and ammonium mandale 50 per cent. solution

METHYL SALICYLATE. — In 5-cwt, lots price is 3s. 1½d. per lb.; 1-cwt., 3s. 2d.; 56-lb.. 3s. 2½d.

OLEIC ACID. - Price for B.P. is about 153s, per cwt.

POTASSIUM 8-HYDROXYQUINOLINE SUL-PHATE.—1-kilo is 47s. 1d. and 50 kilos, 44s., per kilo.

SACCHARIN.—In lots of 1 lb. and over B.P.C. powder is quoted at 99s, 10d. per lb., the SODIUM SALT is 80s, 10d. per lb. Prices include duty and carriage.

SEMICARBAZIDE HYDROCHLORIDE.—Technical grade is 20s, per lb. for 1-cwt. lots.

SODIUM BROMATE.—1-cwt, lots are quoted at 10s, 9d, per 1b.

Sodium chloride. — Re-crystallised is 30s. per cwt.

SULPHATHIAZOLE. — Manufacturers' rate for 1-cwt. lots is 16s. 6d. per lb.

SULPHOCARBOLATES. — SODIUM PHENOL-

SULPHOCARBOLATES. — SODIUM PHENOL-SULPHONATE, B.P.C. (powder) is 5s. 6d. per lb. in 1-cwt. lots and ZINC, B.P.C., is 5s. 6d. TARTARIC ACID. — Rates for the home trade are as follows:—10-cwt, lots, 270s. per cwt.; 5–9-cwt., 272s.; 2–4-cwt., 274s.; 1-cwt., 275s.

UREA. — Manufacturers' rates for pharmaceutical grade are £72 12s, 6d, per ton in 1-cwt. bags non-returnable. Technical quality is £41 12s, 6d, per ton for 4-ton

- In 1-cwt. lots the ZINC CARBONATE.

ZINC CARBONATE. — In 1-cwt, lots the price is now 1s, $9\frac{1}{2}$ d, per lb.

ZINC PEROXIDE. — Price (per lb.) for 1-cwt, lots of B.P. is 5s, 3d.

Alcohol

PRICES of plain British spirit per proof gall, are as follows:—

gall, are as follows:—

Ethyl Alcohol: (95 per cent. Gay Lussac, 66 o.p.); where the number of proof gall, taken over any one year ended December 31 is 300,000 or over the price is 2s. 9d.; 200,000 and less than 300,000, 2s. $9\frac{1}{2}$ d.; 100.000 and less than 200,000, 2s. 10d.; 50,000 and less than 200,000, 2s. 10d.; 10,000 and less than 100,000, 2s. 11d.; 10,000 and less than 10,000, 2s. 11d. Prices are exclusive of duty and are for tank wagon lots. are for tank wagon lots.

The following grades are subject to a premium on the above prices as follows:—

premium on the above prices as follows:— Absolute Alcohol, 99.5 per cent., 74.5 o.p., 3d. more per proof gall., the special high strength (99.9 per cent., 72.2 o.p.), 5d. more; Doubly - Rectified Alcohol (S.V.R.), 95.8 per cent., 68 o.p. is 4d. more and P.I. Rectified Alcohol, 96.1 per cent., 68.5 o.p., 8d. more. R.R. Absolute Alcohol (re-rectified, 99.7 per cent., 75 o.p.), 12s. 6d. per bulk gall. net.

Methylated Spirits

METHYLATORS' rates per gall. in Great Britain are as follows:—

Britain are as follows:—

Industrial Methylated spirit: Strength 61 o.p., 500 gall. and over in one delivery, 4s. 9\frac{1}{2}4c, 100 gall. and under 500 gall., 5s. 0d.; 30 gall. and under 100 gall., 5s. 0d.; 10 gall. and under 100 gall., 5s. 6\frac{1}{2}4c, 5 gall. and under 10 gall., 5s. 6\frac{1}{2}4c, 5 gall. and under 10 gall., 5s. 9\frac{1}{2}d. Strength 64 o.p., 1d. per gall., 66 o.p. (B.P.), 2d.; 68 o.p., 2\frac{1}{2}d. more than the above rates with 74 o.p. from 4\frac{1}{2}d. to 9d. more according to quantity. Tank wagon delivery is 1\frac{1}{2}d. per gall. of list price—minimum, 500 gall. For industrial methylated spirit of standard toilet quality prices are from 5s. 4d. for 500 gall. to 6s. 2\frac{1}{2}d. Pryidinised industrial methylated spirit:

Pyridinised industrial methylated spirit: Strength 61 o.p., 500 gall. and over, in one delivery, 5s. 0\frac{1}{2}d.; 100 gall. and under 500 gall., 5s. 3\frac{1}{2}d.; 30 gall. and under 100 gall., 5s. 6\frac{1}{2}d.; 10 gall. and under 30 gall., 5s. 9\frac{1}{2}d.; 10 gall. and under 10 gall., 5s. 0\frac{1}{2}d. Strength 64 o.p., 1d. per gall. more than foregoing rates.

Mineralised methylated spirit: Strength 61 o.p. in one delivery, 100 gall, and under 500 gall., 5s. 5d.; 30 gall. and under 100 gall., 5s. 8d.; 10 gall. and under 30 gall., 5s. 11d.; 5 gall. and under 10 gall., 6s. 2d. Strength 64 o.p., 1d. per gall. more than foregoing rates. more than foregoing rates.

Methylated resin finish is 3d. per gall, over and methylated shellac finish is 1s. per gall, over the prices for pyridinised methylated spirit.

Terms:—Delivered free and carriage paid on returned empties; net cash one

Crude Drugs

AGAR. — Kobé No. 1 is 12s. per lb., in bond. New-crop offers are easier at 10s. 6d., c.i.f., for January-February ship-

ALOES. — Prime Cape on the spot is nominally 330s. per cwt. and for shipment (if available) 320s., c.i.f. Curação for shipment is not quoted.

Areca nuts. — Quotations are from 40s, to 55s, per cwt., as to quality on the spot. Shipment, 45s., c.i.f.

Benzoin.—Sumatra block on the spot is from £25 to £32 per cwt. No. 1 for shipment is £24 5s., c.i.f. Almonds, 15s. per

BISMUTH METAL. - Minimum rate is 16s, 6d. per 1b.

CAMPHOR. — B.P. POWDER is from 5s, 9d. to 6s, 6d. per lb., duty paid as to origin. TABLETS, \(\frac{1}{4}\)-oz. are 6s. 6d., c.i.f., for afloat and 6s, 3d., c.i.f., for shipment.

CASSIA BARK. — Whole on the spot is about 90s. per cwt., in bond, and for forward delivery, 80s., c.i.f. Broken, 75s., in bond, and 67s. 6d., c.i.f.

CHAMOMILE. — Belgian flowers 5s. 3d. per lb. on the spot.

CINNAMON.—Ceylon for shipment (c.i.f.) per lb., OOOO, 6s. 3d.; OOO, 6s. 1½d.; OO, 6s.; O, 5s. 10½d.; firsts, 4s. 10d.; quillings, 3s. 3d.; chips, 9¼d. to 9½d.

CLOVES.—Zanzibar on the spot are now quoted at 3s. $2\frac{1}{2}d$. per lb.; prompt shipment, 3s. $0\frac{3}{4}d$., c.i.f.

COCHINEAL, - Black-brilliant is 33s. per lb. on the spot and silver-grey, 17s. 6d.

COCILLANA.—Bark is 2s. 6d. per lb. on the spot.

ERGOT. — Portuguese on the spot is 10s. per 1b.; forward, 9s. 3d., c.i.f.; Polish is 7s.; Hungarian, 12s., and American, 10s., all on the spot.

GALANGAL.—Root is quoted at 55s, to 60s, per cwt., c.i.f., for f.a.q.

GUM ACACIA. — Kordofan cleaned sorts on the spot are 140s, per cwt. and prompt shipment, 127s., c.i.f. March-April, 124s.,

Honey.—Firm. Australian light-amber on the spot is from 138s, to 148s, per cwt.; medium-amber is scarce at 130s, to 140s.; Argentine is almost unobtainable at 145s.; Jamaican, 145s, to 150s, with new-crop expected to be shipped in February.

Hydrastis. — Root is from 18s. per lb., on the spot.

IPECACUANHA. — Nicaraguan is offered for shipment at about 60s. per lb., c.i.f., February delivery; Colombian at 51s., c.i.f. Spot Colombian is 56s.; Nicaraguan, 66s. 6d.; Matto Grosso, 57s. 6d.

KARAYA. — No. 1 gum on the spot is quoted at 300s. per cwt., and No. 2 at 265s.

KOLA NUTS. Jamaican are offered at about 8d. per 1b., spot.

LANOLIN. — In 1-ton lots the price of NHYDROUS, B.P., is from 160s. to 165s. DET CWL; 5-CWL lots from 162s. to 167s. DET CWL, HYDROUS, B.P., is from 140s. to 42s. for similar quantities. All in drums, arriage paid, U.K.

LIQUORICE. — Quotations (per cwt.) for natural root are: Anatolian, 65s.; Rusian, 47s. 6d.; Persian, 35s. Block juice s 220s. per cwt. for the Anatolian and 95s, for Chinese on the spot. Italian tick from 210s. to 475s. per cwt. duty tick from 310s. to 475s. per cwt., duty aid.

LOBELIA HERB. — Scarce on the spot t 13s. 6d, per lb. No offers from origin. LYCOPODIUM. — Supplies of Russian riple-sifted on the spot are quoted at s. 3d. per lb. in bond and 8s. duty paid. MALE FERN. — A parcel of Bulgarian is flered on the spot at 40s. per cwt., duty

MENTHOL. — Chinese is 46s. 6d. per lb., duty paid, and 46s., c.i.f., as to position. Brazilian is 45s., duty paid; January-February shipment, 42s. 6d.,

MERCURY. — Nominal spot value is £88 10s. to £89 per flask of 76-lb. ex warehouse.

PAPAIN. — Spot value for East African grade one is from 18s. per lb. Ceylon brown is 14s. per lb., c.i.f. and spot.

PEPPER. — White Sarawak on spot is 2s, 11d, per lb, and for February—March shipment, 2s. 9d., c.i.f. Black Sarawak is 2s. 0\frac{1}{2}d. to 2s. 1d. per lb, spot and February—March shipment, 1s. 11\frac{1}{2}d., c.i.f. Black Malabar is 320s., per cwt., spot and February—March shipment, 260s., cif

Podophyllum. — *Emodi* is quoted at 50s. per cwt., ex wharf. *Peltatum* is 150s. per cwt., ex wharf. Per scarce on the spot and at origin.

QUILLAIA. — Spot offers of bark are about 225s. per cwt, with shipment from 195s., c.i.f.

SARSAPARILLA.—Jamaican native red on the spot is 3s. 6d. per lb. and for shipment, 3s. 1½d., c.i.f.

SEEDS. — (Per cwt.). Anise.—Tunisian is 250s., duty paid; Spanish offered at 270s., duty paid. Caraway. — Dutch are quiet with sellers quoting 150s., duty paid. quiet with sellers quoting 150s., duty paid. Celery. — Indian on spot are offered at 135s. Coriander. — Steady with spot Moroccan nominal 95s., duty paid; Danubian or Rumanian, 65s., duty paid; Danubian or Rumanian, 65s., duty paid. Shipment, Moroccan quoted at 68s. 6d., c.i.f. No business reported. Cumin.—Quiet with prices unchanged. Spot, Cyprian, 132s. 6d.; Moroccan, 135s., duty paid; Iranian, 130s., duty paid. Shipment, Cyprian quoted at 118s., c.i.f. Dill.—Indian in poor demand at 65s., spot. Fenuel. — Indian remains unchanged at 65s. on spot. Fenugreek. — Firm. Indian on spot is 75s. Shipment. Moroccan is 61s. 6d. and Indian, 65s., c.i.f. Mustard. — English, 60s. to 80s., according to quality. ing to quality.

SENEGA. — Spot is 20s, 6d, per lb. Shipment from 19s, 9d., c.i.f.

SENNA. — Tinnevelly LEAVES (per lb.). 1955 wet-crop Prime No. 1, 1s. 1\frac{1}{2}d., and No. 2, 11d.; prime No. 3, 8d.; f.a.q., No. 3, 7d., spot; PoDs, f.a.q., 6d., c.i.f. Alexandrian manufacturing pods, 1s. to 1s. 3d., spot; hand-picked are from 1s. 6d. to 6e 6d. per lb per the particular. 4s. 6d. to 6s. 6d. per lb. as to quality.

SHELLAC. — F.O.T.N. is 355s. per cwt., F.O. No. 1, 380s.; fine orange, 395s. to

SQUILL.—White is offered on the spot at 65s, to 70s, per cwt.

STRAMONIUM. — Indian LEAVES are 75s, per cwt, and European 80s, on the spot.

STYRAX.—Spot is 5s. 8d. per lb., duty paid.

Tragacanth.—No. 1 ribbon is £175 to £180 per cwt.; No. 2, £135 to £140.

TURMERIC.—Madras finger on the spot is quoted at 157s. 6d. to 160s, per cwt. New crop for April-May shipment is quoted at 100s, to 102s. 6d., c.i.f.

VALERIAN ROOT. — A parcel of Belgian is quoted at 175s, per cwt.

Vanillin. — Rates (per lb.) are: 5-cwt. lots, 30s.; 1-cwt., 30s. 3d.; 56-l30s. 6d.; smaller quantities, 30s. 9d.

WAXES. - BEES' .- Dar-es-Salaam, ship-WAXES. — BEES',—Dar-es-Salaam, shipment, 610s., c.i.f., spot, 610s.; Sudanese, 605s., duty paid and 545s., c.i.f.; Abyssinian, spot, 590s., duty paid; shipment, 545s., c.i.f. CANDELILLA. — Landed terms are 415s. per cwt. CARNAUBA. — Fatty grey, spot, 450s. per cwt.; for shipment, 440s., c.i.f.; prime yellow, spot, 910s.; shipment, January-February, 842s. 6d., c.i.f. c.i.f.

WITCH HAZEL LEAVES. — Offers are 1s, 11d. to 2s. per lb. on the spot.

Essential and Expressed Oils

ALMOND. — B.P. is nominal at 11s. per

AMBER. — Rectified on the spot quoted at from 1s. 6d. per 1b.

Angelica seed. — Price per lb. is now quoted at 225s.

BIRCH TAR.—Rectified is about 14s, per lb. in 1-cwt. lots.

BUCHU.—Spot is offered at 360s, per lb. CAMPHOR, WHITE. — Chinese is 2s. 3d. per lb., duty paid.

CARDAMOM. — Price per lb. is from 360s, for English distilled and from 265s. to 295s, for imported.

CASTOR. - In minimum 2-ton lots the price of pharmaceutical quality for spot-February delivery is £144 per ton, naked ex mill.

CHENOPODIUM, — Spot supplies are about 34s, per lb. Shipment value, 27s.,

Cod-Liver.—B.P. is 11s, 6d, per gall, in charged returnable drums. Veterinary is from 9s, 6d, per gall.

DILL, — B.P. English-distilled oil is quoted at 60s. per lb. Imported oils are scarce at 36s, per lb.

FENNEL.—Spanish sweet on the spot is quoted from 12s. per lb, with Russian at

GARLIC.—English is 55s. per oz.

GERANIUM.—Bourbon is 87s. 6d. per lb. on the spot.

GINGERGRASS.—Offers are from 30s. to 31s. per lb.

LEMON. — Prices of B.P. oil (4 per cent. citral) vary greatly on the spot according to quality and range between 25s. and 55s. per lb. Californian, 28s. 6d. to 43s. 7½d., c.i.f., as to quality, subject to licence.

LEMONGRASS.—Quiet. Spot is 13s. 6d. per 1b., and shipment, 12s. 9d., c.i.f.

LIME. - Supplies of West Indian distilled are offered from 30s. to 35s. per lb., on the spot.

NUTMEG.—Offers are from 46s. to 60s.

OLIVE.—Spot supplies are from 25s, 6d, to 27s, per gall. Shipment rates are not quoted.

Orange.—Spot quotations of sweet oil are tending to be firmer from 5s, per lb. upwards. For shipment, proprietary brand Californian sweet is 6s, 1½d., c.if., and cold-pressed, U.S.P., 9s, 4d., c.if. Terpeneless is 210s, per lb., spot. Bitter orange oil is 20s, per lb.

Origanum. — Sellers of 75 per cent. phenols at 13s, 6d, per lb.

OTTO OF ROSE.—Bulgarian is 450s, and Turkish, 190s, per oz.

PALMAROSA. — East Indian is from 62s. 6d. per lb. on the spot and from 55s., c.i.f., for January-February shipment. Madagascar is 55s., spot.

PATCHOULI. — Penang is 48s. 6d., duty paid, and 42s., c.i.f.

PENNYPOYAL. — Spot is quoted at 23s, 6d, per lb., duty paid.

PEPPERMINT. — Arvensis: Chinese is 32s, 9d. per lb. on the spot and c.i.f. Brazilian, 28s, 9d. to 29s, 3d., spot and 25s, 6d., c.i.f. Italian "Mitcham"-type oil is from 65s., spot, and American, 42s, 6d. to 47s 6d. 42s, 6d, to 47s, 6d.

PETITGRAIN. — Paraguay for shipment is 23s, 6d. per lb., c.i.f., and 25s, to 26s, 6d. on the spot, as to brand and holder.

ROSEMARY. — Spanish oil on the spot is from 5s. 1d. to 5s. 7d. per lb., duty paid, for drum lots, as to quality.

Rue.--Spot offers are from 14s. per lb. Sassafras.—Brazilian is 7s. per 1b., duty

COMING EVENTS

Items for inclusion under this heading, should be sent in time to reach the Editor not later than first post on Wednesday of the week of insertion.

Tuesday, January 31

LONDON SECTION, SOCIETY OF CHEMICAL INDUS-TRY, Burlington House, London, W.1, at 6 p.m. Jubilee memorial lecture: Mr. Jean Gerard on "La Coopération Technique Européenne" (English translation of the lecture available).

SHEFFIELD BRANCH, PHARMACEUTICAL Grand hotel, at 8 p.m. Professor G. M. Wilson (professor of pharmacology and therapeutics, Sheffield University) on "The Design of Clinical Trials of New Drugs."

Wednesday, February 1

EAST METROPOLITAN BRANCH, SOCIETY, Danecourt, Church Hill, Walthamstow, at 8 p.m. Miss M. A. Burr (a member of the Society's Council) on "A Survey of Pharmaceutical Affairs.

LONDON SECTION, ROYAL INSTITUTE OF CHEMIS-TRY, South-west Essex Technical College, Forest Road, London, E.17, at 7 p.m. Messis. J. S. Hughes and R. L. Bass on "Silicones Their Manufacture, Application Analysis."

JUNIOR BRANCH, Manchester Pharmaceutical ASSOCIATION, Café Royal, at 7 p.m. Gala ball. Ticket from Mr. W. D. Birch, 55 Church Street, Newton Heath, Manchester, 10.

NEWCASTLE, DISTRICT AND NORTHUMBERLAND BRANCH, PHARMACEUTICAL SOCIETY, old Branch, Pharmaceutical Society, old assembly rooms, Westgaie Road, Newcastle, at 7.15 p.m. Annual dinner and dance.

Thursday, February 2

CHEMICAL SOCIETY, Royal Institution, Albemarle Street, London, W.1, at 2.30 and 7.30 p.m. Symposium on "Recent Advances in the Chemistry of Colouring Matters."

DURHAM COUNTY BRANCH, PHARMACEUTICAL SOCIETY, Waterloo hotel, Old Elvet, Durham, at 7.45 p.m. Dr. J. E. Ennis (pathologist, Dryburn hospital) on "Inflicted by the Doc-

HULL CHEMISTS' ASSOCIATION and BRANCH, New York ballroom, at 8 p.m. Supper dance.

LEEDS SECTION, ROYAL INSTITUTE OF CHEMISTRY. chemistry lecture theatre, Leeds University, at 6,30 p.m. Dr. T. Vickerstaff on "Colour."

SCHOOL OF PHARMACY, HISTORICAL AND LITERARY Society, lecture theatre, 17 Bloomsbury Square, London, W.C, at 5.30 p.m. Mr. W. B. Purchase (County of London coroner) on "Experiences of a London Coroner."

SOMERSET BRANCHES, PHARMACEUTICAL SOCIETY, and NATIONAL PHARMACEUTICAL UNION, Bekynton restaurant, The Square, Wells, at 5 p.m. Tea; at 6.30 p.m. Address by Mr. H. Holmes (a former chairman of the N.P.U.). Also a film show

Friday, February 3

ABERDEEN SECTIONS, CHEMICAL SOCIETY, ROYAL INSTITUTE OF CHEMISTRY, and SOCIETY CHEMICAL INDUSTRY, Marischal college, at 7.30 p.m. Mr. R. C. Chirnside on "Analytical Chemistry, Chemical Analysis and the Analyst.'

EXETER BRANCH PHARMACEUTICAL SOCIETY. Assembly Rooms, South Street, at 7.30 p.m. Mr. S. Keeble (virus research laboratories, Glaxo Laboratories, Ltd.) on "The Production of Vaccines from Bacteria and Viruses."

Exeter Section, Chemical Society, Washington Singer laboratories, at 5 p.m. Professor E. E. Turner on "Some Stereochemical Problems."

SOUTH-WEST LONDON CHEMISTS' ASSOCIATION and Wanosworth Division, B.M.A., Berkeley Rooms, Putney, London, S.W.15, at 8.30 p.m. Mr. T. E. Scott-Chard (B.O.A.C.) on "Britain's Highways of the Air.'

Merseyside Branch, National WOMEN PHARMACISTS, Y.W.C.A. lounge, Slater Street, Liverpool, at 7.15 p.m. Mrs. I, E. Abbott on "The History of Spectacles."

TRADE MARKS

APPLICATIONS ADVERTISED BEFORE REGISTRATION

From the "Trade Marks Journal," January II

For chemical preparations for use in redressing and restoring the texture of textile fabrics after dry cleaning (1)
DRYTEX, 746.188, by Pronk, Davis & Rusby,

Ltd., London, N.1.

For medicated preparations for external human use in the treatment of rheumatism, ischialgia, euralgia, lumbago, arthritis and arthrosis (5) FORAPIN, 720,349, by Heinrich Mack Nachneuralgia, folger, Illertissen, Bavaria, Germany.

For medicines for the treatment of indigestion

BUDDIES, 743,996, by Lewis & Ormerod. Ltd. Oldham, Lancs,

For aspirin for use in the treatment of indigestion (5)

DIGESPIRIN, 747,190, by Birley's Antacid, Ltd., London, E.C.2.

For veterinary preparations and substances (5) CESTRID, 747,401, TAPERIN, 747,403, by Allied Laboratories, Ltd., London, W.1.

AGRITOX, 745,598, by May & Baker, Ltd., Dagenham, Essex, SOMNAC, 746,046, by AGRITOX, 745,598, by May & Baker, Ltd. Dagenham, Essex, SOMNAC, 746,046, by Cupal, Ltd., Blackburn, Lancs. CORTI-SPORIN, 746,113, by The Wellcome Foundation, Ltd., London, N.W.I, DETORMENT, 747,286, HOMOPIN, 747,289, by C. H. Boehringer Sohn, Ingelheim, Germany.

For photographic and cinematographic cameras, lens holders, filter holders and lens hoods (9) CIMA, 747,043, by Julius Joseph Silber, London, W.C.1.

For photographic apparatus, instruments, and

For photographic apparatus, instruments, una utensils, parts and fittings (9) ATOMITE, 747,414, by Marcel Mark War-ner, London, N.W.3, and Bernsen's Inter-national Press Service, Ltd., London, W.C.2.

For sponges, brushes and combs (21)
Device with the word COLLO, B745,694, by

Collorheincollodium G.m.b.H. Bonn, Germany. For brushes (21)

VICTRENE, 746,7 Portsmouth, Hants 746,750, by John Palmer, Ltd.,

For gloves for domestic and household purposes, other than bottling gloves of india rubber (21) GAYLOVE, 746,251, by F. & G. Turnpenny, Ltd., London, E.C.2.

From the "Trade Marks Journal," January 18

For all goods (1)

MOLTOPREN, 734,643, by Farbenfabriken Bayer, A.G., Leverkusen, Germany.

For chemical products for use in the textile, leather and paper industries (1) COMBATEX, 744,320, by Ciba, Ltd., Basle,

Switzerland.

For sensitised photographic films (1) MONOPLEX, 746,031, by Pathéscope, Ltd., London, N.W.2.

For chemical products used in industry (1) PASCODORA, 746,358, by Polak & Schwarz (England), Ltd., Enfield, Middlesex. For water-softening agents (1)

SEQUON, 747,530, by the Gelgy Co., Ltd., Middleton, Manchester.

For adhesives and glues (1)
RAYMARDEX, 747,590, by Petmar Industries, Ltd., Batley, Yorks.

For all goods (3)

D-SAN-DET, 747,579, by Airkem, Ltd., London, W.1. IDRIANOL, 747,591, by C. H. Boehringer Sohn, Ingelheim, Germany,

For cleaning, polishing, scouring and abrastve preparations, soaps; detergents (not for use in industrial and manufacturing processes) (3)
SPEC-TAK, DIVOBRITE, 741,296-97, DIVER-SEY, 741,299, by the Diversey Corporation, Chicago, U.S.A.

or non-medicated toilet preparations (3)
PESCODORA, 746,357, by Polak & Schwarz
(England), Ltd., Enfield, Middlesex, LORAMA, 747,172, by Joseph Gershon Druck, New ton, Manchester, SEA-AND-SKI, 747,204, by Kathleen Court (England), Ltd., London, S.W.2. DIORISSIMO, 747,983, by Parfums Christian Dior, Paris, France

For hair lotions (3) PHILJOY, 746,970, by Philip Vezza, London, E.6.

For preparations for the hair (3)

INDOLA COLOR FRICTION, 747,042, by Indola N.V., Voorburg, South Holland.

For bandages and surgical dressings (5)

TELFA, B736,852, by the Kendall Co., Boston, U.S.A.

For disinfectants; antiseptics; sanitary substances; preparations for killing weeds and destroying vermin; and insecticides (5)
DIVERSOL, 741,302, by the Diversey Corpor-

ation, Chicago, U.S.A.

For all goods (5)

PHOLCOLAN, 743,154, by Glaxo Laboratories, Ltd., Greenford, Middlesex, CENTALUN, 747,284, by C. H. Boehringer Sohn, Ingelheim, Germany BICARNESINE, 747,697, by Société des Laboratoires Labez, Brussels, Belgium. D-SAN-DET, 747,098, by Airken, Ltd., London, W.1. PYRABUTOL, 744,325, by Synfarma, Naradni Podnik, Czechoslovakia.

For moth-repelling and destroying preparations (5)

ROTOMOTH, 743,385, by W. & F. Walker, Ltd., Kirkby, nr. Liverpool,

PRINT & PUBLICITY

Commercial Television

THE following products are being advertised on commercial television (London station) on the days stated:-

SUNOAY, January 29: Beecham's pills; Brylcreem (between 8 and 9.30 p.m.); Loxene medicated shampoo; Zubes cough lozenges; Max Factor preparations; Lux toilet soap (between 8 and 9.30 p.m.)

TUESDAY, January 31: Philishave dry shaver (between 8 and 10 p.m.); Knight's Castile soap (between 8 and 9.30 p.m.).

THURSOAY, February 2: Gibbs' S.R. tooth-paste (between 8 and 10 p.m.).

FRIDAY, February 3: Beecham's pills; Anadin. SATUROAY, February 4: Silvikrin shampoo,

C. & D. WEEKLY LIST OF PRICES

A-Advanced; R-Reduced; I.R.P.-Inclusive Retail Price; *-Tax 30 per cent; †-Tax 90 per cent. DELAVELLE (G.B.), LTD. (from February 1) Doz. 14 0 20 0 2 10 A 4 0 A Blue orchid brilliantine† 2 oz. 5 oz. Delayelle hand cream with lanolin† 2 oz. 17 4 3 6 A

GLAXO LABORATORIES, LTD, (tax exemp-Suavitil tablets 5 R 100

SECROL, LTD. (from January 9) 10 A Sek toilet roll

P.A.T.A. PROTECTED LIST

(Alterations notified this week by the Proprietary Articles Trade Association.) BUFFHAM'S PREPARATIONS (from February Resinol toilet soap*

WILLIAM R. WARNER & CO., LTD. (additional sizes) Veganin tablets* Each Gelusil suspension 24 oz. 9

WRIGHT, LAYMAN & UMNEY, LTD.

Wright's lysol 4 oz. 1 gall. 15 8 OZ. (new pack)

NEW PRODUCTS AND PACKS

FASSETT & JOHNSON, LTD. Mistol mist nasal spray 28 0 GLAXO LABORATORIES, LTD.
Complan 40 0 4 2 SMITH & NEPHEW, LTD. Elastoplast Airstrip

1 0 2 0

Many NEOPHRYN SPRAYS will be changing hands this winter



NEOPHRYN, already widely prescribed by doctors, is rapidly gaining in popularity. It may be confidently recommended for its rapid, prolonged and safe relief of nasal congestion, and for the convenience and efficiency of the plastic atomiser.

NEOPHRYN is also available in spray form with antihistamine, and as Nasal Drops (especially suitable for children) in a half-ounce bottle with dropper.

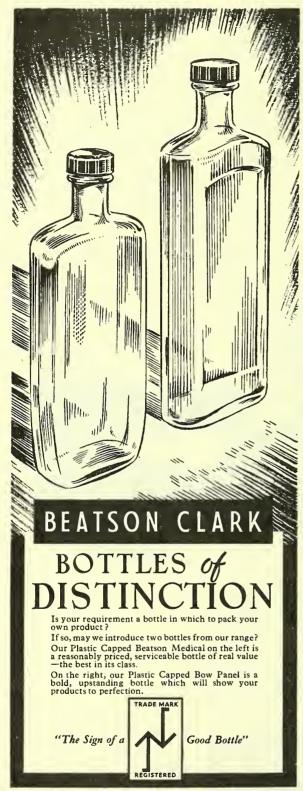
NEOPHRYN

(F)

Trade I

BAYER PRODUCTS LIMITED Neville House, Kingston-on-Thames, Surrey

Associated export company: WINTHROP PRODUCTS LTD



BEATSON, CLARK & CO., LTD.

GLASS BOTTLE MANUFACTURERS Established 1751

ROTHERHAM

YORKSHIRE





NEW SPARER WITH THE LARGEST CIRCULATION IN HORTHERN IRELANC

MOSANS

(EST. 1908)

S.S. 100

PREPARATIONS

LIST AND PRICES ON APPLICATION

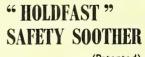
DEPT. P. 84 ACRE LANE, LONDON, S.W.2

or any Wholesaler

IS IT A POISON?

For quick and easy reference use the C&D' POISONS GUIDE, Vol. I

THE CHEMIST AND DRUGGIST
28 ESSEX STREET, STRAND, LONDON, W.C.2



(Patented)

Fitted with

PURE LATEX CHERRY or STRAIGHT TEAT.

Ask your wholesaler or write us for your nearest stockist

MAYLEN MFG. CO., LTD. 7-9 HOLLOWAY HEAD BIRMINGHAM I

Enquiries invited for—

ASPIRIN B.P. OXYQUINOLINE and Compounds BARBITURATES A FULL RANGE OF ALL BARBITURATES

ALL BRITISH MANUFACTURE AT OUR MODERN FACTORY AT BARNET

PIERSON, MORRELL & CO. LTD.

THE ORIGINAL BRITISH ASPIRIN MAKERS

Telegrams: Pierson Morrell Barnet BARNET, Herts.

Telephone: BARnet 0723

QUICK, she wants some Prestoband! ...and even if it's not urgent, wise folk will be in to buy a supply. They always keow from experience—and our

wise folk will be in to buy a supply. They always keep Prestoband handy. They know from experience—and our national advertising ever reminds them—that it's by far the quickest, cleanest, healthiest way of dressing a wound or strapping a muscle.

wound or strapping a muscle. It's easy on, painless off, and no mess left behind!

Keep up with your customers! Stock antiseptic, water-resistant, pinless, knotless, neat and tidy Prestoband.

Generous trade terms. Packed in attractive counter display outers. 3 widths; 2", 1" or §" at 1/6, 9d. or 7d. a 4-yard roll.

Made by Vernons of Preston. Sole Distributors in the U.K. are Fassett & Johnson, Ltd., 86 Clerken well Road, London, E.C.1; and in Eire, Fassett & Johnson (Ireland), Ltd., 6 Crow Street, Dublin

PRESTOBAND

THE ANTISEPTIC SELF-ADHESIVE BANDAGE

* sticks to itself, but NOT to the skin!

NYLON ELASTIC YARN (Lightweight) HOSIERY
Two way Stretch (N.H.S. DRUG TARIFF)

SERVICE?

NYLON ELASTIC HOSIERY Approved for National Health Service Prescriptions

Yalcs "Service" Nylon Elastic
Hosiery combines firm
surgical support with good
looks and hard wear. As
well as being light and comfortable, the two way
stretch Nylon Elastic
washes well and lasts
longer. Available in
full foot and open
toe in a full range
of sizes.

OPEN TOE

FULL FOOT

Above knee, seamed

or unseamed. Sizes $8\frac{1}{2}$, 9, $9\frac{1}{2}$, 10, $10\frac{1}{2}$. In a fashionable dark

shade. May be worn without over hose.

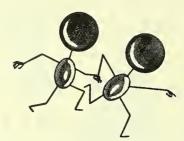
Above knee, unseamed in small medium and large sizes (a self measurement chart supplied). In a light shade suitable for wear as understocking.

Special Orders made to measure.

YALCS "SERVICE" NYLON ELASTIC HOSIERY

Sales Agents: GLENSIDE (London) LTD, 37 Percy Street, London W1
Phone: MUSeum 9440

Let us put you on the map in





Southern Africa

The combined purchasing power of Southern Africa's two and a half million whites and over thirty million Africans makes this territory a land of opportunity for the owners of proprietary products. To overseas manufacturers, we can offer the benefit of extensive on-the-spot experience and unequalled assistance in manufacturing. distributing and merchandising in these territories.

Customers' own material processed into

PASTES; OINTMENTS; POWDERS, ETC.



THERAPION (PTY.) LTD. Manufacturing Chemists

THIRTEENTH ROAD, KEW, JOHANNESBURG, TRANSYAAL, SOUTH AFRICA
P.O. 80x 70 BRAMLEY

Chairmen
W. J. ROGERS, Ph. C.
Managing Director:
D. BOSWELL, Ph. C.
A. E. ROGERS,
F. A. BERRILL, C. G. KERA
L. F. CRAIG,
A. E. GOODMAN

NUCTA CREAM SHAMPOO



has proved an attractive selling line

Delightfully perfumed and with exceptional lathering and cleansing power.

Available also with Egg and Lemon.

IN 2 OZ. SIZE FOR HOME USE

Selling at 2/7½ (17/6 per doz. plus tax)

OBTAINABLE FROM YOUR USUAL WHOLESALER

MANUFACTURED BY

STEWART, GOODALL & DUNLOP LTD.

12 IA PRINCES STREET — EDINBURGH







CORKS, STOPPERS, BUNGS.

Telephone

Royal 4922/3

CAMPERDOWN STREET LONDON, E.I.



The Chemist's Dictionary of Synonyms?

This book incorporates Rouse's Synonyms and contains over 7,000 Synonymous terms.

It is a most useful book of reference.

5/- postage 4d. from

THE CHEMIST & DRUGGIST
28 ESSEX STREET, STRAND, LONDON, W.C.2





- Issues a receipt for every customer
- Counts the number of sales
- Gives a complete record of the days takings
- Metal construction. Fully guaranteed

The outstanding feature of the Petco till is the duplicate receipt issued for every transaction; this ensures that the exact money taken must go into the drawer. In addition, a device which operates each time the drawer is opened records the total number of sales and indicates if there has been unauthorised access to the till. All you have to do is to record the amount of the sale and press the release bar. Immediately and automatically the cash drawer springs open ... the warning bell rings ... the sales record moves up under the window ... a receipt is issued for the customer and the counting device

The till that makes mistakes obvious

STANDARD MODEL 16 gns.

(as illustrated)

WIDE APERTURE MODEL

£ 18-10-0

SEND FOR ILLUSTRATED BROCHURE to the MANUFACTURERS

records the further sale.

A.G.S. & PETRONIC LTD.

BEL WORKS ESTATE, HAMPTON ROAD WEST, HANWORTH, FELTHAM, MIDDX. Tel.: Feltham 4054

For Quality Glass Containers— and excellent service

- DISPENSING BOTTLES
- RIBBED OVALS
- Nos. I to 7½ sizes
- ROUND SCREW JARS Tall and Semi-squat
- BOW-FRONT PANELS
 1-oz to 8-oz and 16-oz.
- PANELLED FLATS
- VIALS ½-oz to 3-oz
 - OLIVE OIL BOTTLES

WHOLESALE ONLY

NATIONAL GLASS WORKS (YORK) LTD

FISHERGATE, YORK. Tel. YORK 3021 ALSO AT: 105 HATTON GARDEN, LONDON E.C.I

Packed in easily handled cartons



NOV - the full range of MAV'S TOWELS pre-backed in one self-service unit

PRESENTATION In the tradition of Maw's discreet and dignified point-of-sales displays which have yielded 200% INCREASE IN SALES OVER THE LAST 2 YEARS!

PUBLICITY A delicate reminder even to the most self-conscious customer . . . PROMPTING REPEAT SALES.

PROFITS Full margin now increased by COMPREHENSIVE PARCEL DISCOUNTS TO 44% ON COST.



Ask Maw's man for full details

Chemists only

Contains a comprehensive assortment of Maw's All Wool and Soluble towels. This pre-packed unit counts as one case for discount... MERCHANDISER FREE.

S Maw Son and Sons Limited

Barnet

England

Display-and you'll sell and JOHN BELL'S

COLD CAPSULES

For Influenza, Feverish Chills and Colds

BONUS TERMS
AND DISPLAYS

13 to the dozen for orders of 3 dozen or more, plus attractive display material that creates impulse sales.

Retail price 1/10½ (incl. Tax) per tin.

Trade 11/6 per dozen (P. Tax 3/5½).

JOHN BELL, HILLS & LUCAS LTD., OXFORD WORKS, WORSLEY BRIDGE ROAD, LONDON, S.E.26

GAG



WHITECROSS OPTICAL COMPANY (LONDON) LTD.

55 WHITECROSS STREET, LONDON, E.C.I

Tel: MONarch 0114.

BUCKLEY-BOWKER TABLET CO. LTD.

29 PARKFIELD STREET · LONDON N.I

Tel: CANonbury 3401

Manufacturers of the highest standard

AND OF EVERY KIND OF QUALITY

AND OF EVERY KIND OF QUALITY TABLETS TO CUSTOMER'S OWN FORMULATION

AN ENCYCLOPÆDIA OF POISONS LAW

The Chemist & Druggist POISONS GUIDE

Compiled and Co-ordinated by W. A. WHATMOUGH B.Sc., Ph.C., F.R.I.C.

No pharmacist can afford to be without these two Volumes. They provide complete information on what the authorised seller of poisons should do in every situation covered by the Poisons Rules and Dangerous Drugs Regulations.

Order these essential volumes NOW I

VOLUME I POISONS LIST & KEY

VOLUME 2
POISONS PROVISIONS & EXPLANATIONS

20/= (postage 6d.) 40/= (postage 6d.)

Order from your Bookseller or direct from The Publisher: 28 ESSEX STREET, STRAND, LONDON, W.C.2.

BURNSIDE'S EUCALYPTUS OILS

Distilled in Australia from Eucalyptus leaves in accordance with the B.P. specification. W. K. Burnside Pty., Ltd., Melbourne, Australia offer:—

80/85% Rectified B.P. Eucalyptol B.P. 70/75% Rectified B.P.
Oil Eucalyptus Dives 40/45% Oil Eucalyptus Dives 90/95%
For the production of Thymol and Menthol
Oil Eucalyptus Phellandra—Phellandrane

Oil Eucalyptus Phellandra—Phellandrene For use in Antiseptics and Disinfectants

Agents for U.K.: WILSON & MANSFIELD, LTD., 15 Philpot Lane, LONDON, E.C.3

Phone: MANSION HOUSE 9264-5-6

(WHOLESALE ONLY)

Grams: WYFIELD, LONDON

Let your till tell the tale

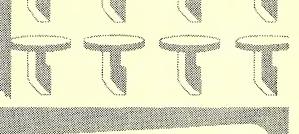


STOCK...DISPLAY...SELL...



Movie-paks

... and listen to the till ring up the profits. There's nothing quite like G.B. Movie-paks to loosen the purse strings of the home movie enthusiast. 8 mm. or 16 mm. films in wonderful variety — comedies, westerns, sport, travel, adventure. There's big business for you in selling G.B. Movie-paks.





Give this attractive leaflet dispenser a prominent place on your counter. Filled with G.B. Moviepak News of current releases, you'll be keeping your customers up-to-date — and your selling too!



G.B. EQUIPMENTS LTD

A Member of the BRITISH OPTICAL

AND PRECISION ENGINEERS' GROUP

Within the Rank Organisation

NEW RELEASES

and coming attractions—new additions to the ever increasing range of Movie-pak successes. Greater variety means greater selling possibilities for you!

JANUARY

"THE HOT SHOT" P. 4218 (Woody Woodpecker versus Redskin in a hilarious sharp-shootin' contest)

"FLASHING FIGURES" P. 4219
(Glamour and thrills for the sports enthusiast)

FEBRUARY

"LOST MINE" P. 4224
(An exciting new Western for Hopalong
Cassidy fans)

"REDWOOD SAP" P. 5060 (The rise and fall of Woody Woodpecker)

MARCH

"AWAY WITH THE BALL" P. 4221
(A grand sporting film the whole family will enjoy)

"CINDERELLA" P. 5176
(One of the famous Lotte Reiniger shadow cartoons)

Write for catalogue and further details to:

G. B. FILM DIVISION

DEPT. CD/1/56,

1 AINTREE ROAD · PERIVALE · MIDDLESEX PERivale 7481

SUPPLEMENTING NATURE...



The combination of bile salts and pancreatice enzymes in FELOPAN stimulates normal peristalsis and readily relieves chronic constipation. The two forms of FELOPAN—with and without mild laxatives—provide the complete treatment for breaking the cathartic habit and correcting intestinal indigestion.

FELOPAN (Orange-coated Tablets)

For routine or for subsequent therapy.

FELOPAN COMPOUND (Blue-coated

Tablets) For initial use in severe cases only.

FELOPAN

a supplementary source of bile salts and pancreatic enzymes

Packings: 100, retail price 3/6d. + 7d. tax; 1,000 dispensing pack.



ACETANILIDE

COATES & COOPER LTD PYRAMID WORKS, WEST DRAYTON, MIDDX.



Synthetic Fine and Pharmaceutical Chemicals

A Selection from our Range
BENZYL BENZOATE

BENZYL CHLORIDE BENZYLIDENE ACETONE **ACETOPHENONE** AMYLCINNAMIC ALDEHYDE **ANETHOLE BROMSTYROL** ANISALDEHYDE CINNAMIC ALDEHYDE AZO BENZENE CITRAL CITRONELLOL BENZALDEHYDE BENZOIC ACID BENZOYL CHLORIDE COUMARIN DIPHENYL METHANE EUCALYPTOL BENZYL ACETATE BENZYL ALCOHOL **EUGENOL**

GERANIOL
GUAIACOL
HYDROXYBENZOIC ESTERS
HYDROXYCITRONELLAL
IONONE
LINALYL ACETATE
METHOXY ACETOPHENONE
PHENYLACETAMIDE
PHENYLACETIC ACID
ROSONE
SODIUM BENZOATE

W. J. BUSH & CO. LTD

LONDON, E.8 · ENGLAND

Telephone No.: Clissold 1234

Factories: Hackney, Mitcham, Widnes, Tottenham, Witham Branches: New York, Montreal, Johannesburg, Melbourne, Auckland.







CONTAINING PHOLCODINE

This cough preparation has for its basis a mixture of treacle. honey and liquorice, with squill, peppermint and aniseed, etc., and a small dose of the drug "Pholoodine."

"Pholoodine" is considered to have all the advantages of morphine in the suppression of unproductive cough, without its disadvantages. In its favour are its low toxicity and its lack of influence on bowel movement and tone, it is non-constipating and it is well tolerated by children. It is also more active than Codeine, less toxic and has fewer reactions.

PRICES: P. Tax Trade Retail per doz. per doz. per bottle 5/1½ 8/8½ 2/7 4/5 4 oz. ... 17/-8 oz. ... 29/-

BONUS—Orders of 1 dozen—1 bottle
Orders of 3 dozen—6 bottles

Crowner, as illustrated, free of charge.

A PRODUCT OF Cuxson, Gerrar BIRMINGHAM



Increased advertising means more customers for you-more customers asking for both these delicious, health-giving drinks. Meet the extra demand by ordering ample stocks NOW and make sure of year-round profits. Eye-catching displa/ material, certain to boost sales, can be obtained from your usual wholesaler or direct from

BARNETT & FOSTER LTD.

QUEENSBRIDGE ROAD, LONDON, E.S.

C, essential to good health.

Tel.: CLissold 7132

-the perfect drink or young

and old alike.



CAMTHOL LINCTUS 3/- per bott. inc. P.T. Cost 14/113
CAMTHOL VAPOUR RUB 1/9 per jar inc. P.T. Cost 14/113

B. HOOPER & CO. LTD.

6 RAILWAY PLACE, FENCHURCH STREET, LONDON, E.C.3.



New research on Procidets proves their amazing effectiveness in the treatment of streptococcal and other throat infections

Newly evolved techniques have convincingly established the value of PROCIDETS in practice.

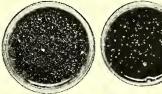
It has been demonstrated that four Procidets sucked in succession destroy most of the bacteria and fungi in the mouth.

Procidets are fully effective against bacterial and fungal infections of the throat and mouth and clinical trials on hundreds of cases of severe tonsillitis, pharyngitis and stomatitis resulted in 95% cures in 48 hours.

Procidets contain no antibiotic. They are non-toxic and cannot build up resistant strains.

Procidets v Penicillin

Comparative effect on ORAL BACTERIA







Before

After 1 Procidets

After 4 Procidets

These photographs are of representative plates showing the dramatic action of Procidets in comparison with Penicillin Lozenge B.P.







Before

After I Penicillin Lozenge B.P.

After 4 Penicillin Lozenges B.P.

Each I gramme lozenge contains: Cetyl Pyridinium Chloride...

Sodium Propionate B.P.C. 100 mg. Benzocaine B.P.

Cartons, 18 lozenges, metal foil sealed pack. Retail price 2/4 (incl. P./tax). Basic N.H.S. cost 1/4 per carton.

Also available dispensing pack 498 lozenges for N.H.S. patients PROCIDETS prescribable on Form EC10. Classification category 3/4.

Procidets

Literature and samples on request

HARKER STAGG LTD · LONDON E.1

Stepney Green 2022



Further outlook WET!

Fibrositis, Lumbago, Stiff Neck and

INFRA-RED

and Radiant Heat Lamps.

Unbeatable value at prices from 73/- retail including Tax.

Illustrated brochure available from

Dept. 6, Hinders Limited 174/192 Estcourt Road, London, S.W.6. Est. 1949



APOLOGY

Price Error in Current NuNale Advertisement

IN this week's issue of "Woman" (January 23rd) the price of NuNale is given as 2/6d. a bottle instead of 2/8d. which is the correct retail price since the increased Purchase Tax.

We apologise to Chemists for any trouble they may be caused and invite them to show this announcement to customers in case of dispute.

Sole Distributors: Dendron Distributors Ltd., 94 Rickmansworth Road, Watford, HERTS.

for Longer Stronger Nails

A STANDARD REFERENCE BOOK FOR PHARMACISTS

PHARMACEUTICAL **FORMULAS**

VOL. 1

A new edition of this invaluable standard reference book is now available. Completely revised and incorporating the latest formulations required by recent advances in medical science, it presents a comprehensive summary of vital pharmaceutical information compiled from world-wide sources.

PRICE 37/6

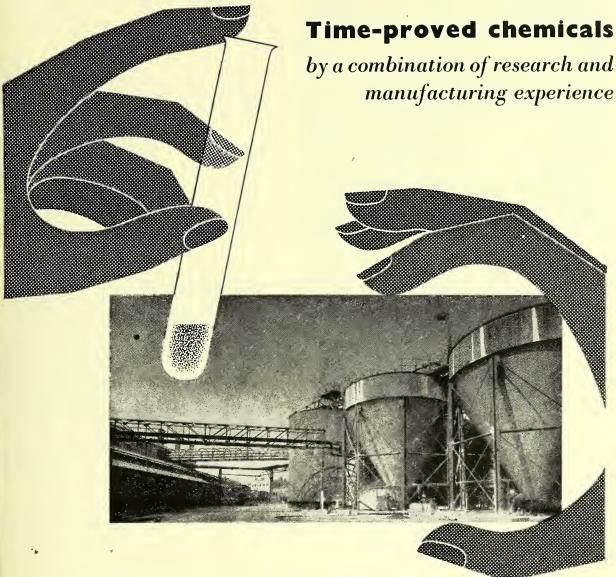
(Postage 1/1)

Order from your Bookseller or from the Publisher:

The

CHEMIST AND DRUGGIST

28 ESSEX ST., STRAND, LONDON, W.C.2



BEHIND THE SUCCESS of The Washington Chemical Company's products in so many industries is a story of research and experiment which goes back more than a hundred years. Today, every product made by the company is backed by a research organisation whose facilities include chemical, physical, spectrographic, and rubber compounding laboratories which are constantly dealing with new problems in almost every field of industry.

This experienced background is available to any manufacturer who requires information on the performance of any of our products in test formulae. Information in the form of technical bulletins is available on request.

THE WASHINGTON CHEMICAL CO. LTD.

A member of the TURNER & NEWALL ORGANISATION

WASHINGTON, CO. DURHAM, ENGLAND



Supplied only under Doctor's prescription

A Sol-Tan for every Purse and Purpose

For home, professional and hospital use "Sol-Tan" produce a wide range of Health Lamps and Electro Medical appliances. They are scientifically designed, fully tested and guaranteed for 12 months. Ask for details of the tax free Infra-Red Table model selling at the low price of £3.10.0.



Write for details and Catalogues to
THE LONDON COMMERCIAL ELECTRICAL STORES LTD.
20-23 Cursitor Street, London, E.C.4



Infra-Red Table Model, Long or Medium Wave. Only sold against Doctor's prescription.



Price 42/- per gross sachets, plus P.T. AVAILABLE ON SALE OR RETURN

VINES BIOCRIN LIMITED
222-224, HARROW ROAD, LONDON, W.2

Telephone: CUNningham 1172-3

HOME TRADE



EXPORT

WILD CHERRY BARK SENEGA HYDRASTIS

and all other Botanicals, Gums, Waxes, Essential Oils and Spices

JOHN KELLYS (LONDON) LTD. 24 OLD BROAD STREET, E.C.2

Telephone: LONdon Wall 6585 (4 lines)
Telegrams: "Ergotine, Stock, London"

NEW YORK . HAMBURG

They're asking for it!...

New Bubbly Stergene makes history



WILL IT WASH WHITES!

New "Bubbly" Stergene can be used for the boil; it gives real bright whiteness to whites.

THE DE LUXE WASH?

Matchless for Nylon, 'Terylene,' Rayon, Silks, Woollens and all fine fabrics. Gives real whiteness to whites, yet clean-washes the greasiest overalls.

WHAT ABOUT COLOUREDS?

New "Bubbly" Stergene gives a vivid gay wash to all coloureds that are safe in plain water.

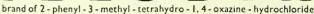
DOES IT LATHER? New "Bubbly" Stergene provides a controlled balanced lather—generous in the wash but easily removed at the first rinse.

ANYTHING ELSE?

Yes! New "Bubbly" Stergene has a delicate fragrance—brings outdoor freshness to the indoor wash.

DOMESTOS LIMITED, COLLEGE WORKS, NEWCASTLE UPON TYNE, 6.

A new prescription is coming your way PRELUDIN





the Appetite Controlling Agent that Reduces the Risk of Reducing — even in Cardiovascular Disorders

From 1st November powerful advertising with full pages in the Medical Press, supported by a heavy mailing campaign. will introduce PRELUDIN to the medical profession. PRELUDIN with its outstanding features is destined to become the prescription of choice in all cases of obesity.

Prescriptions for PRELUDIN will soon be handed over your counter.

The medical profession will prescribe PRELUDIN because:

- PRELUDIN is safe, swift and sure for all patients—even for those with cardiovascular disorders and hypertension.
- PRELUDIN acts quickly and effectively, and without risk, by curbing the patient's appetite and breaking the psychogenic overeating habit.
- PRELUDIN enables the patient to lose weight safely and without mental strain by strengthening adherence to a prescribed diet.
- PRELUDIN, unlike dexamphetamine, does not raise the blood pressure, does not affect the heart and does not create excessive mental stimulation.

Be sure that you are ready to dispense this new prescription. Supplies are available from your usual wholesaler.



PRELUDIN - THE SAFE PRESCRIPTION FOR OBESITY

Manufactured and distributed in England by Pfizer Ltd., for C. H. Boehringer Sohn, Ingelheim am Rhein,

Registered proprietors of the trade mark.

* Regd. Trade Mark

ORRIDGE & COMPANY

CHEMIST BUSINESS TRANSFER AGENTS AND VALUE

BRANCHES: BIRMINGHAM . C.C. IIII BIRMINGHAM . C.C. III BIRMINGHAM .

Irish Representative: Mr. J. A. Bassett, Ph.C., 57 Great Victoria Street, Belfast, Northern Ireland. Tel: Belfast 27078

PREMISES TO LET

17/6 for 36 words (min.) then 4d. per word Box 2/-

Box 2/SHOP TO LET, Wexham Housing Estate, Slough, Bucks. The Slough Borough Council invite offers for a 14 years' lease of a new shop on the Wexham Estate for the business of chemist, Ready in March, Self-contained maisonnette available for lessee, Particulars and application forms from Town Clerk, Town Hall, Slough, Bucks, C 9672 SHOPS WITH LIVING ACCOMMODATION on new estates at Hornchurch and Gidea Park suitable for chemist. Rents £400 per annum on lease; also lock-up shops in Romford from £200 per annum. Further particulars, apply Hilbery Chaplin & Co., F.A.I., 135 South Street (opp. Station), Romford, Tel.: 163/4. C 3265

BUSINESSES FOR DISPOSAL 17/6 for 36 words (min.) then 4d. per word Box 2/.

DUMFRIESSHIRE, Established well-situated country business for sale on death of proprietor. Total turnover approximately £3,000-£3,500. Price required for stock (at valuation) and goodwill, Possibility of rented house available. Henderson & Mackay, Solicitors, Bank of Scotland Chambers, Lockerbie C 3319 HERBAL DRUG STORES, established 23 years, Town centre, Property and business reasonable for quick sale, Present living on, ideal for lock-up, suit chemist, Large turnover, accountant's figures, Owner retiring, J. Mawson, 57 George Street, Oldham. C 3321

APPOINTMENTS

18/- per half inch (min.) and pro rata. Box 2/-

BARNET GENERAL HOSPITAL, WELLHOUSE LANE, BARNET, HERTS Pharmacist Applications are invited for the post of Phar-

Applications are invited for the post of Pharmacist in the new Pharmacy Department of this Hospital (Category V), Salary £500 x £25 (3)—£575 x £30 (5)—£725 per annum, exclusive of higher qualification allowance and London Weighting, Commencing rate dependent on experience, Applications stating age, qualifications and experience, with names of two referees to be sent to Hospital Secretary,

C 9682

BRADFORD "A" GROUP HOSPITAL MANAGEMENT COMMITTEE

Pharmacist required at the Bradford Royal Infirmary (Category V Hospital), Salary in accordance with Whitley Council decisions, Applications, stating age, experience, and names of two referees, to the Secretary, Bradford Royal Infirmary,

XIII CHESTER AND DISTRICT HOSPITAL MANAGEMENT COMMITTEE

Pharmacist

Applications are invited for the post of Pharmacist in the Group Pharmacy, Whitley Council alary and conditions of service.

Applications giving full details of age, qualifications giving full details of age, qualifications and experience together with the names and addresses of two referees should be forwarded to the Group Secretary, 5 King's buildings, Chester.

CENTRAL MIDDLESEX HOSPITAL,

PARK ROYAL, N.W.10

Assistant in Dispensing
required, Salary on Whitley Council scale, Applications stating age and experience with names of two referees to Chief Pharmacist.

CHERRY KNOWLE HOSPITAL,
RYHOPE, Nr. SUNDERLAND,
Co. DURHAM
Pharmacist
part-time (approximately 6 half-days weekly).
Remuneration according to national scales for Health Service, viz., 34s. per session of four hours (Pharmacist-in-sole-charge). Active Psychiatric Hospital of 850 beds, Written applications forthwith to the Group Secretary.

C 9621

CRUMPSALL HOSPITAL, MANCHESTER, 8

Assistant Pharmacist
A vacancy exists for an Assistant Pharmacist,
Please apply by letter to the Hospital Administrator as soon as possible,
C 9563

GENERAL HOSPITAL, HEXHAM,

HEXHAM,
HEXHAM AND DISTRICT
HOSPITAL MANAGEMENT
COMMITTEE
Pharmacist
Applications are invited for the above post which is in a modern department providing a pharmaceutical service to the group (738 beds). Some small-scale manufacturing and sterilising work is done.
Salary in accordance with the Pharmaceutical Whitley Council scales, i.e., £500 by annual increments to £725 plus additional £25 for recognised higher qualification.
Applications stating age, qualifications, experience and names of two referees to the Group Secretary, Hexham General Hospital, Hexham, Northumberland, as early as possible. C 9673

HACKNEY HOSPITAL, LONDON, E.9 (General—841 Beds) Locum Pharmacist Salary according to experience, to maximum £14 14s, p.w. Apply Secretary, above address. C 240

KING EDWARD VII HOSPITAL,
WINDSOR
(Category III Hospital)
Pharmacist
PHARMACIST required mid-February at King
Edward VII Hospital, Windsor (Category III
Hospital). Whitley salary, Applications giving
details of service with names of three referees
to Hospital Secretary.

C 9662

NEWMARKET GENERAL

HOSPITAL, SUFFOLK
Assistant in Dispensing
Applicants should hold the certificate of the
Society of Apothecaries, Salary in accordance
with Whitley Council Scalc.
Applications stating age, experience, qualifications and the names of two referees to the
Medical Superintendent,
C 9614

ST. LUKE'S HOSPITALS, **BRADFORD, 5**

Pharmacist
required, General and Maternity Hospital Unit.
Salary in the range £500-£725 p.a. Apply
Hospital Secretary. C 9681

NOTTINGHAM No. 2 HOSPITAL

NOTHINGHAM NO. 2 HUSTIAL
MANAGEMENT COMMITTEE

Pharmacists

Applications are invited for two posts of Pharmacist at the Nottingham City Hospital (Category V). The positions offer excellent experience, and would suit newly qualified persons (previous hospital experience not exceptial) essential)

Salary scale £500-£725 plus £25 for higher qualification.

Applications, stating name and qualifications, together with the names of two referees, should be sent as soon as possible to the Group Secretary, Nottingham No. 2 Hospital Management Committee. Sherwood Hospital, Notting-

ROYAL BERKSHIRE HOSPITAL, READING (Category V)

Pharmacist
Facilities for experience in all branches of pharmacy in enlarged department, with full supporting staff, Apply Group Pharmacist,

SHEFFIELD No. 1 HOSPITAL
MANAGEMENT COMMITTEE
Pharmacist
Applications are invited for the appointment
of Pharmacist at the City General Hospital,
Salary scale £500 x £25 (3)—£572 x £30 (5)—
£725

Apply, giving full details of age, qualifications, experience, etc., and the names of two persons to whom reference may be made, to the undersigned at Nether Edge Hospital, Sheffield, 11.

W. STANSFIELD,

Secretary. C 9669

SOUTHEND-ON-SEA HOSPITAL MANAGEMENT COMMITTEE, GENERAL HOSPITAL,

GENERAL HOSPITAL,
ROCHFORD, ESSEX
(Category III Hospital)
Senior Pharmacist
Applications are invited for the post of Senior
Pharmacist in a well-equipped Department. The
post is interesting and offers scope for a
Pharmacist with initiative and enthusiasm,
Salary according to Whitley Council Scales.
The Hospital is situated near Southend-on-Sea
and resident accommodation could be provided
for female applicant if necessary.

and resident accommodation could be provided for female applicant if necessary.

Applications, staing age, qualifications and experience, with names and addresses of two referees, should be sent to the undersigned as soon as possible.

J. C. FIELD,
Secretary.
C 9646

C 9646

ST. ALFEGE'S HOSPITAL,

GREENWICH, S.E.10

(a) Deputy Chief
(b) Senior Pharmacist

Applications are invited for the posts of (a) Deputy Chief; (b) Senior Pharmacist, in a well-equipped department at the above hospital (Category IV), Inspection of department may be made by arrangement with Chief Pharmacist, National salary and conditions, Applications to Acting Secretary, G. & D./H.M.C., at above hospital as soon as possible, C 9663

THE LONDON HOSPITAL,

THE LONDON HUSPITAL,
WHITECHAPEL, E.1
Pharmacist
has vacancy for registered pharmacist. Salary
£500 rising to £725 plus London Weighting
according to previous experience and service.
Dining room facilities available, Write Secretary. C 219

-RIKER-

Riker Laboratories, Ltd., are again expanding their representative force and invite applications for vacancies in the following areas:

1. Durham.

2. Liverpool and the Wirral Peninsula.

Yorkshire (two vacancies—the West Riding, and North and East Riding).

A pharmaceutical qualification is desirable but consideration will be given to other suitably qualified persons. A Company car is provided and remuneration is by salary, expenses and bonus. There is a Company pensions' scheme in operation. Previous experience is not essential as full training will be given.

Apply in writing in the first instance to Sales Department, Morley Street, Loughborough, marking the envelope "Medical Representative." C 9600

BERDOE & FISH

Chemists' Transfer Agents and Valuers 41 ARGYLE SQUARE, KING'S CROSS, W.C.1 (opposite St. Pancras and King's Cross Stations)

Wanted immediately good class businesses in London, Home Counties and South Coast. Private clients waiting with cash up to £10,000.

All Valuations and Stocktakings, carried out under personal supervision of principals.

Established 1870

Phone: TERminus 3574

Appointments—Continued

THE BETHLEM ROYAL HOSPITAL AND THE MAUDSLEY HOSPITAL

MAUDSLEY HOSPITAL Senior Pharmacist required at the Maudsley Hospital, Denmark Hill, S.E.5. The hospital is a Psychiatric Teaching Hospital associated with the Institute of Psychiatry in the University of London, Salary scale as agreed by the Pharmaceutical Whitley Council rising to a maximum of £805 a year including London Weighting, £25 a year for higher qualification allowed. Apply giving details of qualifications, experience and names of two referees to K. J. Johnson, House Governor and Secretary, Maudsley Hospital, Denmark Hill, S.E.5. Hill, S.E.5

WEST DORSET GROUP

WEST DORSET GROUP
HOSPITAL MANAGEMENT
COMMITTEE
Senior Pharmacist
(male or female) required, Salary and conditions
of service in accordance with Whitley Council
recommendations, Scale: £575-£775 p.a, The
successful candidate will be required to assist
in the pharmaceutical departments at both
Weymouth & District Hospital, Weymouth,
and Dorset County Hospital, Dorchester, Applications, giving details of age, qualifications
and experience, together with names of two
referees, to Group Secretary, West Dorset
H.M.C., Damers Road, Dorchester, Dorset,
immediately, C 9654 immediately.

SITUATIONS VACANT 12/- for 36 words (min.) then 4d, per word Box 2/-

The engagement of persons answering these advertisements must be made through a Local Office of the Ministry of Labour or a Scheduled Employment Agency if the applicant is a man aged 18-64 inclusive or a woman aged 18-59 inclusive unless he or she, or the employment, is excepted from the provisions of the Notification of Vacancies Order, 1952.

RETAIL (HOME)

ASSISTANT PHARMACIST required by oldestablished firm of Bristol chemists at their main branch, Excellent salary and prospects for the right person, Apply the Secretary, 107 Fishponds Road, Bristol, 5, C 236 DONCASTER CO-OPERATIVE CHEMISTS, LTD., require the services of Pharmacists (male or female) as branch managers, 44-hour week; minimum annual salary £840; bonus, increments for sales increases, Rota duties are additional payments, Applications with usual particulars to the Superintendent Chemist, Doncaster Co-operative Chemists, Ltd., P.O. Box 20, Doncaster. Co-operative Chemists, Ltd., P.O. Box 20, Doncaster.

CLASGOW, Branch manager or manageress wanted by S.C.W.S., Ltd., Retail Drug Department, for branch at 369 Cathcart Road, Glasgow. Modern, well equipped pharmacy with adequate supporting staff. Good salary will be paid with entry to superannuation scheme after initial period of service. Application in writing, stating age, experience, and when available for interview to Mr. G. M. Archibald, Technical Supervisor, S.C.W.S., Ltd., Retail Drug Department, 187 Bogmoor Road, Glasgow, S.W.I.

C3311

LONDON, S.W. Wanted, assistant for dispensing, etc. Good hours and salary. Box C 3275.

EXPERIENCED LADY, surgical belt and truss fitter, required by an old-established firm in the Westminster-City area, Reasonable hours and canteen available. Write stating age, details of career and salary required, Box C 3290.

NORTH LONDON. Unqualified assistants required with dispensing experience for vacancies situated in N.W. district. Salary according to age and experience. Permanent positions. Three weeks holiday a year. Hours 9 a.m. to 6 p.m. Thursday 1 p.m. Apply to A, R. Cross, Ltd., 476 Hertford Road, Enfield, or telephone Howard 1723 or 2916.

PHARMACIST required for the position of branch manager, male or female, Applications in writing stating age, experience, and wage required, together with copies of recent testimonials to the General Manager, Heckmondwike & District Co-operative Society, Ltd., 3 Oak Street, P.O. Box 16, Heckmondwike, Endorse envelope "Chemist" in top left-hand corner.

ROYAL PARADE PHARMACY, Hunstanton.

ROYAL PARADE PHARMACY, Hunstanton, Norfolk, nr. Sandringham, and 16 miles from King's Lynn, requires experienced assistant in dispensing, lady, or one with knowledge of dispensing, counter and good toilets. Apply, stating age, experience and salary required. Tel.: Hunstanton 29.

RETAIL (OVERSEAS)

TANGANYIKA. Qualified chemist, preferably single lady, for Dar es Salaam, Salary £1,000 p.a, Passage paid both ways, Please send particulars to East Africa Traders Corporation (London), Ltd., 232 Bishopsgate, E.C.2, C 3323

WHOLESALE

A LEADING GROUP OF COMPANIES with an international reputation in the pharmaceutical industry have a vacancy for an assistant technical manager. The successful applicant should be either a chemist, a pharmacist or a chemical engineer and must have held the position of works manager in a factory within the pharmaceutical or chemical industry and be experienced in modern production methods, Technical qualifications should be the equivalent of a university degree. The position entails co-ordinating the technical should be the equivalent of a university degree. The position entails co-ordinating the technical activities of overseas factories (under the direction of the technical director) in the field of both production and quality control and will necessitate visiting overseas factories when necessary. This vacancy offers an interesting and exceptional opportunity on the overseas technical development side of the organisation. The successful applicant will be eligible for membership of the profits participation scheme and the executive non-contributory pension scheme. Apply in writing only giving full details of qualifications, age and experience to Box C 9627.

Box C 9627.

DUE TO A POLICY OF EXPANSION a company of international repute, the leader in its field, marketing nationally advertised specialities, will shortly be appointing an additional representative to call on retail and wholesale chemists in the North and East Ridings of Yorkshire. The position will be permanent and pensionable. Remuneration is by salary and commission and is above average. Full expenses with car provided, Applicants, who must be between the ages of 25/40 and prepared to reside in the area appointed, should forward full details of past experience, which will be treated in strictest confidence, to P.S.M., Box C.D. 319, L.P.E., 55 St. Martin's Lane, W.C.2.

ASSISTANT SALES MANAGER. Manufacturing chemists in Lancashire are appointing an assistant sales manager. This is an opportunity for a man nearer thirty than forty, with a good record to date in the proprietary field as a sales builder, and some knowledge of marketing and administration. Unless applicants have just those interests, and wish towork in a vigorous and thoughtful atmosphere, they should not apply. Full details of present and future opportunities will be given at the first interview. Letters will be treated as confidential, and must be addressed to Managing Director, Box C 3286.

BAYER PRODUCTS, LTD., require a young

Director, Box C 5286.

BAYER PRODUCTS, LTD., require a young pharmacist for their Product Development Department to be located in a new factory at Newcastle-on-Tyne. The Company is expanding rapidly and there are excellent prospects in this field. Apply with details of career to:
Bayer Products, Ltd., 15 Central Avenue, West Molesey, Surrey. Tel.: Molesey 3262. C 9639

BOOTS PURE DRUG CO., LTD.

Pharmaceutical Development Department
A vacancy exists for a pharmacist in the
Sterile Products Section of the Pharmaceutical Development Department for work
on formulation, Salary according to age
and experience, Five-day week, Pension
Scheme, Applications with full particulars
should be made to the Personnel Manager,
Station Street, Nottingham, C 9642

BURROUGHS WELLCOME & CO, have a vacancy in their Chemical Sales Division for a Sales Executive (not over 35) with some knowledge of pharmaceutical chemicals and/or sales experience, Applications stating previous experience and salary required to the Manager, Chemical Sales Division, Burroughs Wellcome & Co., The Wellcome Building, Euston Road, N.W.I.

C 9665

& Co., The Wellcome Building, Euston Road, N.W.1.

EXPERIENCED MALE DRUG ASSEMBLER/
PACKER/CHECKER required by old established S.E. London manufacturing chemists and druggists. Five-day week. Details of wages, experience, etc., to Box C 9651.

IMPERIAL CHEMICAL INDUSTRIES, LTD., invites applications from men with a sound medical or pharmaceutical background between 25 and 35 years of age for medical representative work in the South of England, Successful candidates, after an initial period of training, will be posted to territories in London, the Home Counties and South-west England and will be directly responsible to a pharmaceutical sales manager with headquarters in London, Applications in the first instance should be made in writing to the Staff Manager (E), Imperial Chemical (Pharmaceuticals), Ltd., Fulshaw Hall, Wilmslow, Cheshire, C 9676 INTERNATIONAL manufacturers in a progressive market in the motor trade have vacancies for top-grade sales representatives in a large and expanding sales force, Initiative and personality and the ability to sell in a highly competitive market are essential, Age 23-32. Salary, car and expenses, Superannuation scheme, Men whose abilities are likely to reach the high standard required are invited to apply to 80x C 9596.

INVOICE TYPIST urgently required. Hours 9 to 5.30, No Saturdays, Canteen facilities.

INVOICE TYPIST urgently required, Hours 9 to 5.30, No Saturdays, Canteen facilities. Write or telephone for an appointment to The London Essence Co., Lid., Albany Road, Camberwell, S.E.5. Tel.: Rodney 2324, C 234 OLD-ESTABLISHED CORK MANUFACTURER requires representatives, already calling on chemists, including London area. Commission basis only, Box C 3324.

ROCHE

Medical Representatives

Expansion and Promotion have created the following vacancies:

uth Wales. 2. London (North and East). 3. Oxford, Bucks, Berks, Northants. 1. South Wales.

Previous experience not necessary but applicants should hold a pharmaceutical qualification. Applicants with no pharmaceutical qualification should give adequate details of experience, education and/or academic attainment to warrant consideration. Usual expenses and salary commensurate with experience. Contributory pension scheme.

Detailed applications, which will be treated as confidential, to the Secretary, Roche Products, Limited, 15 Manchester Square, London, W.1.

BAYER PRODUCTS LIMITED

invite applications for medical representative appointments in the following areas:

(a) Southern Scotland

(b) Home Counties and London

pharmaceutical or medical background desirable but applicants with other suitable qualifications will be considered. Previous representative experience an asset but not essential as necessary training given. Remuneration is by salary, commission and bonus. A car is provided and all legitimate expenses paid. The Company operates a pension scheme.

These vacancies offer sound prospects in an expanding Company. Applications giving an indication of salary expected should be addressed to The Sales Manager, Bayer Products, Limited, Neville House, Eden Street, Kingston-on-Thames, Surrey.

Situations Vacant—Continued

PART-TIME REPRESENTATIVES required in all areas to work on commission basis for nationally advertised hair preparation selling to wholesale and retail chemists, stores and hairdressers. Write giving details of area covered, etc., to Box C 3299.

PART-TIME REPRESENTATIVES required to work on good commission basis for nationally advertised hair beauty preparations selling to wholesale and retail chemists, stores and hair-dressers. Well established existing connection with excellent prospects for first-class men able and willing to advance existing business, Areas vacant are: (a) South London, Surrey, Kent, Sussex; (b) Northamptonshire, all Eastern Counties and Bedfordshire, Hertfordshire, Oxfordshire, Buckinghamshire and Berkshire, Apply, in confidence, to Sales Manager, Box C 3276. PART-TIME REPRESENTATIVES required to

C 3276.

PHARMACIST required by manufacturing chemist (Surrey) to act as assistant chemist, The successful applicant will be required to deal with production and controls; for the duties involved experience in some field such as hospital practice, analytical work or other work involving a similar standard of accuracy, would be desirable, Commencing salary £850. Write Box C 9652.

PHARMACEUTICAL MANUFACTURERS of international reputation require tablet maker of improver standard. Age 20/35 years. This is an opportunity for a young reliable person to improve his position and widen his experience, Location Liverpool area, Box C 9633.

PROCESS WORKER REQUIRED by manufacturing chemists for Galenical Laboratory, Must be experienced. Write stating age, experience and wage required to Works Manager. perience and Box C 9684.

REPRESENTATIVES

REPRESENTATIVES

An internationally known house of manufacturing chemists require the services of representatives on a salary/expenses/commission basis to market a limited range of toilet preparations in the following areas: North-west England; North-east England; South wales and West of England; South of England, Although backed by a good national advertising campaign and sales aids, the advertisers have no hesitation in saying that to begin with the going will be tough, Applicants must be car owners, Those interested write in confidence to Box C 9643, giving details of previous experience, etc. previous experience, etc.

DUE TO A POLICY OF EXPANSION a company of international repute, the leader in its field, marketing nationally advertised specialities will shortly be appointing an additional representative to call on retail and wholesale chemists in the area comprising South-west London, The position will be permanent and pensionable. Remuneration is by salary and commission and is above average. Full expenses with car provided, Applicants, who must be between the ages of 25/40 and prepared to reside in the area appointed, should forward full details of past experience, which will be treated in strictest confidence, to PSM Box CD, 294 LPE, 55 St. Martin's Lane, W.C.2.

REPRESENTATIVE with pharmaceutical background, to sell drugs and galenicals to chemists in S.E. Lanes, Previous selling experience and a connection in this area essential, Salary £500 yearly, liberal commission and expenses, Please give all relevant details of previous experience, etc., in confidence, to Box C 242.

REPRESENTATIVE, Old-established London pharmaccutical company of highest repute requires a representative for the Midlands area, Applications are invited from gentlemen with a good pharmaccutical background living in or near Birmingham, Remuneration by salary, expenses and bonus according to personal achievement, A company car is provided, Give full particulars in confidence of experience to date, age and salary expected. Box C 9664.

REPRESENTATIVES or sole agents required for development of well-known, non-seasonal and non-competitive proprictary with high selling potential and assured repeats. Several territorics available including London and Home Counties, Only energetic men with record of real selling ability and strong connections should apply. Liberal terms, Other fine products if required, Fullest details in first instance, i.e., age, lines carried, experience, territory, if car owner, etc, Box C 3312, RILLING COMPANY, London and New York, manufacturers of toilet preparations and beauty shop supplies require in several areas representatives with established connections with chemists and stores, They will handle on a generous commission basis nationally advertised hair lacquers, deodorants, etc, Apply, Rilling, Hills, Ltd., 222-4 Borough High St., S.E.1. Hop. 1268/9.

THE BRITISH DRUG HOUSES, LTD., require immediately a Deputy Manager with a thorough knowledge of tablet manufacturing department in London, This position, which is permacists with experience of controlling staff. The company operates a five-day week and has a profit-sharing scheme, Applications in writing, which will be treated in confidence, should give full details of past experience and be addressed to: Ref, HAC/CO The Personnel Manager, The British Drug Houses, Ltd., Graham Street, London, N.1.

WHOLESALE (OVERSEAS)

WHOLESALE (OVERSEAS)

IMPERIAL CHEMICAL INDUSTRIES, LTD., has a vacancy for a pharmacist for medical representative work in British West Africa, based on Lagos, Applicants should be actively interested in a career overseas, where married accommodation could be provided for the successful candidate, Applications with full particulars should be addressed to Staff Manager (Y), Imperial Chemical (Pharmaceuticals), Ltd., Fulshaw Hall, Wilmslow, Cheshire.

C 9675

AGENTS WANTED 17/6 for 36 words (min.) then 4d. per word Box 2/-

ADDITIONAL INCOME by selling our well known sunglasses to retail chemists, stores, etc. Good commission, Vacancies exist in London, Home Counties and South-western area. Accounts to be taken over, Nupro, Ltd., 2 Netherwood Street, London, N.W.6. Mai 9718/9. AGENTS with established connections amongst wholesale and retail chemists required by manufacturers of cyder vinegar, natural wonder health beverage and aid to slimming, Full advertising support. Excellent commission. Reply, with references, to Box C 3313.

AGENTS REQUIRED to sell the nationally advertised Roxy Bathing Cap in the following areas: Yorks, Lancs, Wales, S.W. England. Must have good connections with wholesale and retail chemists, Good commission paid, Box C 243.

C 243.

DISTRIBUTORS, selling to retail chemists, required for well-established brands of chemists' sundries; good profits; first-rate service. Kindly give details of your organisation and of any proprietary brands controlled, area covered, etc. Box C 9623.

OLD-ESTABLISHED FIRM of Manufacturing Chemists wish to contact gentleman already calling on Chemists, Drug Stores and Confectioners and willing to carry additional lines, to take over and extend existing connection in the London area for the sale of a small range of high-class Medicated Confectionery, Vacancy arises through death of previous agent. Liberal commission, Apply Managing Director, Reade Brothers & Co., Ltd., Cleveland Road, Wolverhampton.

C 9634

SITUATIONS WANTED

3/- for 18 words (min.) then 2d. per word. Box 1/-

RETAIL (HOME)

UNQUALIFIED GENTLEMAN, exceptional experience, seeks situation where overworked owner would appreciate conscientious helper. Counter work, disrensing, buying, book-keeping to trial balance. Some photographic experience, Licensed trade, etc. Not too young but active and absolutely reliable, London district preferred but would consider elsewhere Interview any time with pleasure. Box C 3316.

WHOLESALE

REPRESENTATIVE, 10 years present post. Extensive hospital background. Strong connection all London hospitals, seeks post similar with scope for advancement, Only established reputable firms considered. Write Box C 3252. REPRESENTATIVE, 46 years old, excellent connection wholesale and retail chemists, Cheshire, North Wales, Shropshire, Only established, reputable firms considered. Write Box C 3309.

C 3309. **REPRESENTATIVE.** Male, 47, with 30 years' experience retail pharmacy, also wholesale, desires to represent Southern England wholesalers. Box C 3322.

Box C 3322. Age 28 years. Connections with chemists, S.W., S.E., W. London postal areas, Driving licence held, Box C 3315,

Box C 3315, SALES MANAGER seeks change to go-ahead company where his 10 years' post-war experi-ence with leading chemists and department stores can be fully utilised, First-class testi-monials and personal selling record. Box C 2357

C 3257.

TABLETS, ETC. Advertiser seeks post with London firm requiring man with good experience and organising ability. Box C 3295.

AGENCIES WANTED 17/6 for 36 words (min.) then 4d. per word Box 2/-

EXPERIENCED REPRESENTATIVE requires one or two first-class agencies for the areas of North Yorks, Durham, Northumberland, Cumberland, 25 years' experience. Car owner, to work on commission basis, calling upon wholesale and retail chemists. Box C 3317.

CHOOSE HOLLAND

As a base for the packaging and distribution of your Medical, Pharmaceutical and Allied Products.

A well-established pharmaceutical firm in Amsterdam, of international reputation and sound financial standing, with close connections in European and overseas markets offers its unique facilities for repacking and distributing your medical, pharmaceutical and allied products for these markets. All inquiries will receive the closest attention in the strictest confidence on application to Box C 9679.

INCREASE YOUR OUTPUT

MANUFACTURING CHEMISTS, established 1924, with modern factory in Middlesex offer their facilities for processing and packing PHAR-MACEUTICAL, MEDICAL, COSMETIC, FOOD and ALLIED PRODUCTS. The Company has long experience in high-grade tableting and other trade processing for leading houses in these industries. Raw materials supplied if required; laboratory control; all work undertaken in strict confidence by experienced personnel. Well equipped for long-term contracts. Box C 9685.

Agencies Wanted—Continued

REPRESENTATIVE with leading cosmetic house for many years and with valuable connections, chemists and stores, Northern areas, seeks suitable quick-selling agencies. Box C 3283.

C 3283.

WESTERN GERMANY/WEST BERLIN.
British-owned company situated West Berlin,
will accept agencies for pharmaceutical and
cosmetic products, Packing, storage, distribution facilities, Interview with principals in
London, Write Box C 3318.

BUSINESS OPPORTUNITIES 17/6 for 36 words (min.) then 4d. per word Box 2/-

EVERY GO-AHEAD CHEMIST should order Paton's Dental Omment, the original for mouth ulcers, tender spots in your mouth, cold sores, new and old dentures. Gives quick relief from discomfort. Sold for 20 years. 100 per cent, chemist only. Counter display outer of 1 doz, tubes, 15s, plus 4s, 6d, P.T. Retail 2s, 3d, Order now, F. C. Paton (Southport), Ltd., Southport of the manufacture, packing, etc., of private formulæ preparations, liquids, powders, tablets. Dispatch facilities available with own printing department, Frank Macowal & Yanatas, Ltd., Willshaw St., London, S.E.14. Tel.: Tideway 3846-8. C 122 PRIVATE COMPANY offers representation/ Tel:: Tideway 3846-8. C 122
PRIVATE COMPANY
storage/distribution by van/office/telephone.
Yorkshire industrial areas (Lancs if required), chemists, stores and allied trades, Box C 3306.

WANTED 17/6 for 36 words (min.) then 4d. per word Box 2/-

WANTED: Stocks of varnish fumes, Citric acid (preferably English material), Box C 9666.

C 9666.
WANTED: Ethiop's mineral, any quantity up to 1 cwt. Please state price and quantity that can be offered Southall Bros. & Barelay, Ltd., C 9689

ALL KINDS OF BOTTLES, JARS, SCREW CAPS, cartons, packaging materials and manufacturers' stocks of all kinds bought at fair price for spot cash, We are buyers of merchandise of EVERY DESCRIPTION. Clearance Stocks, Discontinued lines. Surplus and Redundant Stocks, Should you have anything for disposal, please send us samples and particulars. Reliance Trading Co., 13 New College Parade, Finchley Road, N.W.3. C 153 WANTED: Small quantity of Midgley Soap No. 48, all offers. E, Adler, 46 Wellington Court, St, John's Wood, London, N.W.8.

WANTED: Stocks of methylene blue 2B cone. 150 per cent., methyl violet 2B 150 per cent. Box C 9683.

WANTED: B.P. glycerine, or material slightly off colour of B.P. Glyceryl monostearate, powder and block. Water white acetone, Box C 9667

WE ARE OPEN TO PURCHASE prime quality Japanese loofahs 14/16 in. Please submit samples with prices to the Manager, Sundries Department, Ayrton, Saunders & Co., Ltd., 34 Hanover Street, Liverpool, 1. C 9674 WE WILL PURCHASE for cash a complete stock, a redundant line, including finished or partly finished goods, packing raw materials, etc. No quantity too large, Our representative will call anywhere. Write or telephone:—Lawrence Edwards & Co., Ltd., 6/7 Wellington Close, Ledbury Road, London, W.11. Tel.: Bayswater 4020, 7692. C 140

MISCELLANEOUS SALES 17/6 for 36 words (min.) then 4d. per word Box 2/-

CONDOR JEWELLERY- SUPPLY invite CONDOR JEWELLERY SUPPLY Invite you to visit their wholesale warehouse and showrooms. Largest jewellery selection includes white china necklets and ear-rings. Sample parcel sent on receipt of remittance or C.O.D. Satisfaction guaranteed. 40 Toynbee Street, Commercial Street, London, E.1. Bishopsgate 0891/8406.

HENNING MARTIN heavy-duty tablet machine with 3-phase motor. Many sets of punches and dies, £60; also Johnson Lightning powder filler and motor with metal table, £50, D. McDermott, Ltd., 70, Church Street, Run-D. McDermott, Ltd., 70, Church Street, Runcorn.
C 3310
MODERN CHEMIST SHOPFITTINGS, drug ranges, wall cases and frameless sliding doors, display counters and showcases, all types of window fittings and display stands. D. Matthews & Son, Ltd., Complete Chemist Shop Fitters & Shop Front Builders, 14/16 Manchester Street, Liverpool.
CNE FULLY MOTORISED Wilkinson capsulating press with pump, pressure gauge, fast and loose pulley, two steam-heated gelatin pans each of approximately 3-gallon capacity and mounted over a sheet forming table complete with guide rails and thickness spreaders, two steam-heated treatment racks, two maturing racks, 51 gelatin plates, 13 sorting trays and a range of moulds comprising two 5-minim round, one 8-minim oval, one 10-minim oval, one 20-minim oval, one 30-minim oval, one 20-minim oval, one 40-minim oval, and one 80-minim oval, one 40-minim oval, also one paint mill, Plant can be viewed on site, Apply Box C 9677.

MISCELLANEOUS

17/6 for 36 words (min.) then 4d. per ward Box 2/-

IMITATION JEWELLERY as additional line will increase your turnover, More than 3,000 lines to choose from, The latest Continental ear-rings, brooches, necklets available, Special "sales" parcels from £10, Jodez (Manchester), Ltd., 8 Shudehill, Manchester, 4, Phone: Dcansgate 6564.

Deansgate 6564. C 238
SHOW-OFF WITH OUR SHOWCASES!
Latest designs, all sizes including glass counters, Free delivery. Write or telephone: Vandome & Hart, Ltd. (Dept. P), Wenlock Road, City Road, London, N.1. (Cle., 7181.) District Showrooms: Manchester, Birmingham, Leeds, Nottingham, Kingston, Blackpool, Colchester, Canterbury, etc.





LEN & HANBURYS LTD LYONDON



COME HISTORICAL MEDICAL LIPPARY STARES LLUOME CHEMICAL WORKS, 305, BAY 1, DARTFORD, KENT

SEARLE Production of the Produ BE CHEMICAL WORKS.

"Metamucil" is designed to be taken with water, milk or fruit juice. It produces a soft, bland mass of inert lubricating bulk initiating reflex peristalsis without irritation or straining. "Metamucil" is the corrective of choice for all ages and those chronically ill.

WORD, KEME. NE POUND NET SEARLE PRAND OF PSYLLIUM HYDROPHILIC MUCILLOID A highly refined and concentrated vegetable mucilloid prepared from the mucillarian mucilloid prepared of the mucilaginous portion of a seed of the psyllium grand formation of a seed of the psyllium group. (Plantago ovata Forsk) and held in dispersion with an equal amoun. amount of a specially prepared dentrose Demulcent in action Metamucifurnishes to the intestinal tract lubrican to the intestinal bland. lubricant effect and provides a bland.

Bulk Corrective for Constipation

"Metamucil" is obtainable in containers of 4 oz. and 16 oz. Retail Price

4 oz. 7/6 (+ P.T. 1/6) 16 oz. 20/- (+ P.T. 4/-) Trade Terms $33\frac{1}{3}\%$ Discount

hon-irritating, easily compressed hulk which encourages normal elimination by Promotion by Promoting physiological peristalsis

TO BE TAKEN IN ACCORDANCE

WITH PHYSICIAN'S INSTRUCTIONS

Order wthrough your Wi

G. D. SEARLE & CO. LTD.

83, CRAWFORD STREET, LONDON, W.I